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AGGRESSION AS AN INDICATOR OF OUTCOME--IS IT ALWAYS A BAD SIGN?

by

Herbert Grossman

Introduction

There is no clear cut evidence that the more aggressive or antisocial emotionally disturbed children are less amenable to rehabilitative efforts. Yet decisions about the rehabilitation of disturbed and delinquent children and youth are influenced by their aggressive behavior patterns. Even in experimental programs, such placement decisions as whether children will be offered services in the community or removed from the community and whether they require a maximum security setting or an open setting are influenced by the frequency and severity of their aggression (Grossman and Fishel, 1966; Warren and Kleine, 1963).

In addition, because of the lack of information concerning the prognostic significance of aggression, the reactions of those involved in rehabilitation to the aggressive behavior manifested by emotionally disturbed children whom they are rehabilitating are necessarily based on considerations other than its prognostic significance. Papanek (1965) underscores this problem in his statements about the management of aggressive behavior.

> Concepts of management--such as they are--are still too often conventional. Even where new concepts are adopted, they rely heavily upon basic philosophical ideas and practical considerations other than those of treatment: for instance, the need to protect society against offenders, the hope of deterring other potential delinquents, etc. These other considerations--important as they are for other reasons--may actually conflict with the interest of successful treatment (p. 210).

The recent growth of programs which stress behavior modification through the application of principles of operant conditioning (Whelan, 1966; Ullman and Krasner, 1965) and programs which attempt to rehabilitate emotionally disturbed children by the application of educational methods (Morse, Cutler and Fink, 1964) make Papanek's concern even more salient because these programs usually consider the reduction of aggression as an important goal for disturbed children in general.

What does the literature indicate about the prognostic significance of aggression?

Undifferentiated Aggression

One way of studying the relationships between aggression and post rehabilitation outcome is to equate all forms of aggression disregarding differences among its many manifestations. Studies which have related aggression to outcome have usually included subjects who were considered either emotionally disturbed or offenders, but not both. This reflects the courts' tendency to

provide different institutional and rehabilitative modalities for these two groups and reflects also the position of many writers who have differentiated these groups for theoretical reasons (Bennett, 1960; Deutch, 1966; and Lidz, 1966).

Offenders

Research about the relationship between aggression and outcome for offenders supports the long held belief that aggressive behavior directed against others in the history of criminals and delinquents is a poor prognostic sign. In the followup study of criminal offenders, Gibbens, Pond and Stafford-Clark (1959) found that aggressive criminals had a significantly higher rate of recividism than nonaggressive ones. They reported that unlike nonaggressive criminals, aggressive criminals offended again almost without exception. Stott (1964) noted a difference in the behavior of delinquents on parole which was related to their previous school behavior. Parolees who had been characterized by hostility towards or rejection of adults in school committed more offenses while on parole than parolees who had not been hostile or rejecting to adults in school.

The reviewer did not locate research relating aggressive behavior during rehabilitation to outcome for criminal offenders.

Emotionally Disturbed

Studies of the relationship between aggression and the post rehabilitation outcomes of the emotionally disturbed have been less consistent than studies dealing with offenders. The inconsistency is due to difference between the results obtained when emotionally disturbed subjects with different types of diagnosis were studied together and when subjects diagnosed as schizophrenics were studied separately.

Research which has included a total population has uniformly indicated that prerehabilitation aggression is a poor prognostic sign. Feldman, Pascal and Swensen (1954) found that subjects who tended to direct blame or hostility exclusively on the environment had a poor prognosis for status one year after discharge from a mental hospital. Robins and O'Neal (1958) in a 30 year followup study of persons who had been patients in a child guidance clinic noted that youngsters who had acted out against others committed significantly more offenses in later years than children who had not.

In a study of referred and evaluated, but nontreated nonpsychotic preschool children in a child guidance clinic, Reiser (1966) observed that children who had been aggressive during their preschool years tended to commit more delinquent offenses as teenagers than children who had not been aggressive in their preschool years. Roff (1961, 1963) studied the relationship between peer relationships in childhood and adjustment in the armed forces, using as subjects children who had been treated in child guidance clinics. He found that those subjects who had acted in a mean, abusive, antagonistic, or dominating manner toward their peers tended to have more less than honorable discharges from military service than children who had had satisfactory peer adjustments.

Research which has used schizophrenic rather than undifferentiated emotionally disturbed subjects has consistently indicated that prerehabilitation aggressive behavior is a good prognostic sign. Schefield, Hathaway, Hastings, and Bell (1958) and Simon and Wirt (1961) reported that poor school deportment is related to good adjustment for schizophrenics. Nameche, Waring, and Ricks (1964) found that schizophrenic patients who had acted out in the community

tended to be the less chronic patients. Grossman (1967) reported that schizophrenic boys who had been aggressive before being placed in a residential treatment center tended to have better outcomes as young adults than did less aggressive schizophrenics.

But, although there is a consistent relationship between prehabilitation aggression and good outcome for schizophrenics, no such consistent relationship has been observed for aggressive behavior which occurs during the rehabilitative process and outcome. McKeever and May (1964) found that schizophrenics who were less cooperative during their hospitalization tended to be released earlier. However, Albee (1950) reported that more aggressive schizophrenics tended to remain hospitalized for longer periods of time and Marks, Stauffacher, and Lyle (1963) found that uncooperative schizophrenic patients tended to be rehospitalized following discharge. Finally Walker and Kelley (1960) found no relationship between patients' hostile behavior while they were hospitalized and either early discharge or symptom improvement.

The finding that aggressive behavior is a favorable prognostic indicator for schizophrenic patients can be derived from the distinctions made by Mahler, Furer, and Settlage (1959). They distinguished between the most severely disturbed, autistic psychotic children who had never established emotional relationships with others even in the earliest stages of their lives and the somewhat less severely disturbed psychotic children who struggled to maintain interpersonal contact in whatever way possible because they had experienced satisfactory relationships during their earliest years.

Differentiated Aggression

Locus of Aggression

Nameche, Waring, and Ricks (1964) and Grossman (1967) reported that although aggression in an undifferentiated sense was a positive prognostic sign for schizophrenics, those who had acted aggressively in the community had a significantly better prognosis than those who aggressive behavior had been confined within the family. One possible explanation for this finding is that aggression which occurs in the community may be indicative of more pervasive, less stimulus specific behavior than aggression in the home. Another possible explanation is that the prognostic significance of aggressive behavior may be dependent on such variables as the persons toward whom it is directed. Some support for the second alternative is Grossman's (1967) finding that aggression in the home was a positive prognostic indicator and aggression in the community was a negative prognostic sign for neurotic boys who had been institutionalized in a residential treatment center.

Impulsivity

Lander and Schulman (1963) report that adolescent boys who had committed unplanned impulsive murders tended to achieve a satisfactory adjustment following residential treatment. They suggest that "acting out" occurs along a spectrum which includes impulsive behavior and shrewdly planned behavior and which has prognostic significance. Arieti (1955) observed that a stormy premorbid personality characterized by sudden violent and drastic changes in attitude and behavior was a good prognostic sign for schizophrenic patients. Grossman (1967) found that schozophrenics who had manifested consistent patterns of impulsive eruptive aggressive behavior had better post rehabilitation outcomes than those whose aggression fit a quiet continued pattern.

Severity of Aggression

Stott (1964) in his followup study of boys on probation found that those boys who had been more seriously aggressive toward adults in school tended to fail probation more often. Black and Glick (1950) reported that the more serious the aggression for which delinquents had been committed to a residential treatment center the poorer was their prognosis. However, when Grossman (1967) grouped students in the same treatment center in terms of their diagnosis, he found that more severe aggression was a positive prognostic sign for schizophrenics.

What conclusions can be drawn from this review of research? When all of the above results are considered together they indicate the following:

1. Prerehabilitation aggressive behavior is a poor prognostic sign for undifferentiated populations of offenders or emotionally disturbed persons.

2. Prerehabilitative aggressive behavior is a good prognostic sign for persons who have been diagnosed schizophrenic.

3. Such variables as whether the aggression occurred at home or in the community, whether it was impulsive eruptive or quiet continued, and whether it was severe or mild influence the relationship between aggression and outcome.

4. There is little evidence for drawing any conclusions about a possible relationship between aggressive behavior which occurs during rehabilitation and postrehabilitation outcome.

What are the implications of this review of research? These findings certainly do not suggest that the emotionally disturbed students in our schools and treatment centers should be encouraged to be aggressive. In fact, there is little evidence available about the relationship between aggression during rehabilitation and outcome. Even for schizophrenics the results are inconclusive. What they do suggest is that aggressive behavior does not mean the same thing for all emotionally disturbed people. More importantly, they indicate that rehabilitators, whatever their profession, need to consider very carefully whether any particular way of managing aggression is appropriate for all emotionally disturbed students.

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ABSTRACT

PROBLEMS AND ISSUES IN EDUCATING THE JUVENILE OFFENDER

by

Garland Wollard

Correctional educators are coming out of the dark ages by virtue of increased interest in correctional education on the part of the Federal government, colleges and universities, and private research foundations.

To date, there is no extensive research which measures the effectiveness of education or training in the correction of an offender. One can only assume that an offender will have to earn a living when released from prison, that he must have a full time job that pays well enough to satisfy his basic needs, and that released offenders have sufficient intelligence and ability to cope with the demands of society.

Juvenile offenders suffer the most from incarceration. Employers will not place them in jobs commensurate to their training or ability. They are often forced to overcome a negative attitude about themselves with little encouragement from their peers or society.

For every juvenile in prison, there are 1,000 equal counterparts who are not in prison. Training and education for the juvenile delinquent is meaningless if he cannot get a job or attain a high school equivalency certificate.

These problems can be lessened if labor, industrial, and governmental leaders will work in close conjunction with correctional personnel, the courts,

and the educators. Education and training alone cannot solve the problems encountered by the juvenile offender.

DIFFERENTIAL LOW-RATE CONDITIONING OF DISTRACTIVE BEHAVIOR

by

Christine Walken

Introduction

In the last decade, the literature shows that individual conditioning techniques have been effectively used to shape a variety of responses in children (Straghan, 1964; Patterson, 1965a, 1965b; Wolf, Birnbrauer, Williams, and Lawler, 1966; Wolf, Risley, and Mees, 1964; Ayllon, 1963; Bachrach, Erwin, and Mohr, 1966; Flanagan, Goldiamond, and Azrin, 1958; Kushner, 1966; Williams, 1959; Hart, Allen, Buell, Harris, and Wolf, 1964; and Madsen, 1966). Individual conditioning techniques have been applied to parent child interactions, hyperactivity, phobias, vomiting, anorexia, stuttering, tantrums, coherant crying, and encopresis in an effort to control and shape these behaviors in preferred directions. The results of these studies have provided impressive evidence for the efficacy and flexibility of these techniques when carefully controlled and applied, outside the laboratory setting.

However, when learning theory principles are extended and applied to groups of subjects, in the form of token economies, the outcomes of intervention have traditionally been less impressive. This result can be accounted for in large part by imprecise control over variables which regulate behavior. The interaction between response classes and treatment variables in these studies becomes so complex as to mask the significance of treatment effects and, in some cases, to preclude the scientific evaluation of treatment variables which are controlling behavior. These token economy studies often collapse a number of laboratory proven techniques into a unified treatment module and apply this intervention process to subjects who exhibit large amounts of inter- and intra-subject variablity in the level, type, intensity, and rate of emitted deviant behavior. Identific l treatment procedures are used to consequate such diverse response classes as hyperactivity, withdrawal syndrome, aggression, attending behavior, and lability As a result, it becomes very difficult to establish which treatment variables are accounting for differential amounts of variance across these response classes. This problem is often further complicated by the existence of uncontrolled variables, specific to the treatment setting, which operate as conditioned stimuli in controlling, maintaining, and shaping behavior.

Individual conditioning techniques which are applied to a specific response in a controlled setting provide for greater amounts of subject matter control than do conditioning techniques that are applied to the emitted behaviors of groups of subjects in special settings. The application of learning theory principles allows for the manipulation of deprivation and satiation states, setting events, and reinforcing stimuli as well as for evaluating treatment effects by: (a) establishing stable response rates, (b) introducing a treatment or controlling variable, and (c) withdrawing that variable (after criterion performance) in order to measure its effect upon behavior. The generalizability of the resulting treatment effects can then be established by successive replications on additional subjects.

Purpose

The purpose of this study was to evaluate the effects of differential low rate conditioning procedures on the high strength distractive behavior of a nine year old subject.

Problem

Phillip was a bright (WISC: 116), underachieving male who, upon referral, exhibited a number of deviant behaviors that were incompatible with successful task oriented performance in the educational setting. Phillip was enrolled in the fourth grade and his chronological age at referral was nine years, six months. His emitted deviant behaviors in the classroom included provoking other children, not completing tasks, creating class disruptions, coercing attention from the teacher, hyperactivity, talking out of turn, and being easily distracted from a given task by ordinary classroom stimuli such as minor noises, movements of others, changes in lighting conditions, etc.

The subject was enrolled in an experimental class for behaviorally disordered children during two months of the academic school year 1966-1967. Behaviors which were directly incompatible with appropriate social behavior and successful academic performance gradually decreased in frequency as Phillip's behavior came under control of the response reinforcement contingencies operating within the experimental class setting. His academic task rate increased markedly and his social behaviors became more appropriate and more easily tolerated by his peers. Phillip's distractive behavior, however, maintained at a high rate, even though reinforcements were consistently withheld for nonattending behavior. His distinctive behavior was task specific (Moyer and von Haller Gilmer, 1955) in that he exhibited low rates of distractibility during high interest tasks and high rates during low interest academic tasks. Phillip's distractive behavior maintained at high strength in spite of "treatment," because of the experimenter's inability to manipulate such controlling variables as a large number of potentially distracting stimuli in the treatment setting, reinforcements for distractive behavior dispensed by other social agents in the treatment setting (peers), escape from an aversive stimulus (low interest task), and invention of substitute activities which were more appealing than the academic task (Goldstein and Seigle, 1961). As this behavior could not be controlled effectively in the experimental setting, an individual conditioning program was designed for administration in a setting where maintaining variables could be manipulated and sources of distractive stimuli could be controlled.

Method

The response measure in this study was established in accordance with Martin and Powers (1967) operant conditioning analysis of attention span. Distractions were defined as those behaviors which were incompatible with the process of attending to a task. Behaviors were recorded as distractions which were directed toward specifiable stimuli (experimenters, noises, movements), as well as those that were apparent responses to internal stimuli (fantisizing, daydreaming). During baseline, treatment, and extinction sessions, the subject's attending behavior was recorded during successive ten second time intervals. The following notational system was used during recording: Z = designates beginning of a new distraction; V = designates continuation of the same distraction thru successive ten second intervals; / = designates a reinforcement; -- = designates subject attended to the click (conditioned

reinforcer).

Treatment sessions were conducted in a setting where extraneous stimuli were reduced to a minimum. The setting contained a table, two chairs, a lamp, and the educational task material used by the subject.

The educational task during baseline and treatment sessions consisted of programed learning material. Lessons for Self-Instruction in the Basic Skills published by the California Test Bureau, were used throughout the conditioning process. Usage of the same program helped to control interest and difficulty factors which are usually associated with different types of programed learning materials. The program also reduced the number of task related questions that the subject had to ask the experimenters for purposes of explanation and clarification.

When the subject's task rate and attending behavior had stabilized during baseline observations, the operational contingencies were verbally specified to the subject immediately prior to the beginning of treatment. The subject was instructed that when a given interval of time had elapsed, in which no distractions had occurred, a click would sound and the experimenter would enter a single check mark in a cumulative recording form. The click served first as an S^D for a reinforcing event and then as a conditioned reinforcer for appropriate behavior. The subject understood that attending to the click represented a distraction and would result in loss of reinforcement for that interval. The subject was allowed to exchange his points for a model of his choice at the conclusion of treatment.

Phillip was initially reinforced with one point for every 30 seconds of distraction free behavior. When the subject had completed 20 distraction free intervals of 30 seconds duration (ten minutes), the interval length was doubled to 60 seconds. The conditioning process was administered according to the following schedule.

Table 1

Graduated Scale for Changing
Response Intervals and Administering Reinforcers

Number of Successfully Completed Intervals	Duration of Interval	Number of Reinforcers Received (Events) (Points)
20	30 sec.	20 x 1
10	60 sec.	10 x 2
5	120 sec.	5 x 4
2.5	240 sec.	2.5 x 8
1.2	480 sec.	1.2 x 16
1	600 sec.	1 x 20

The subject spent ten minutes (total) within each response interval. In the 30 second response interval, one point was administered on 20 separate occasions. In the 600 second interval, a total of 20 points was administered on one occasion, (at completion of the interval). The reinforcing contingency was withdrawn when the subject had completed three ten minute distraction free intervals in succession.

Results

Figure 1

Proportion of Distractive Behavior
in Successive Time Samples

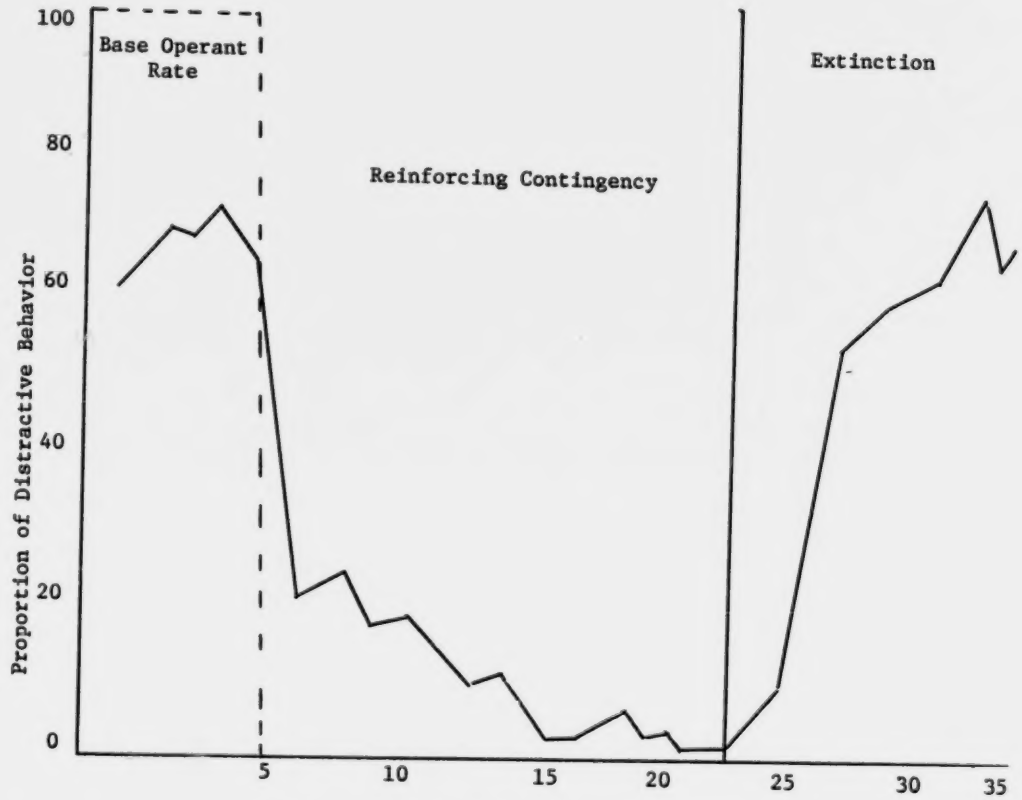
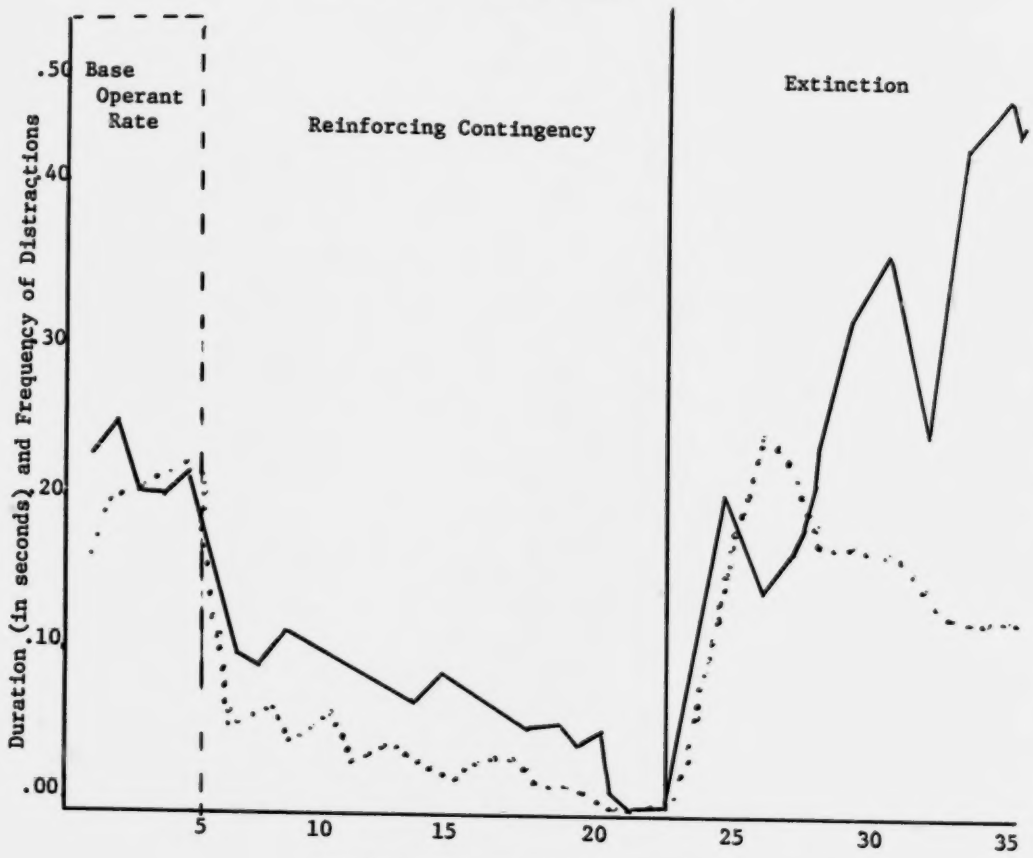


Figure 2

Mean Duration and Number of
Distractions Per Ten Minute Session

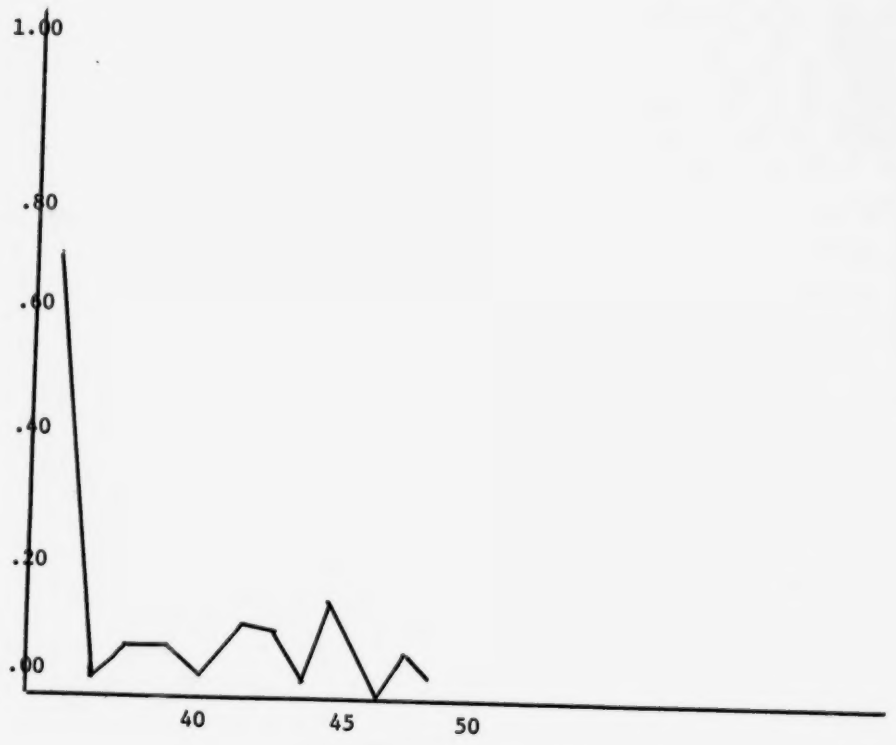


_____ duration of distractions
---------- number of distractions

When the subject's behavior had returned to baseline levels following withdrawal of the reinforcing contingency, Phillip was placed on a variable interval schedule in the regular classroom setting where he was reinforced (on the average) with one point for each 50 minute bloc of distraction free behavior produced. The followup data is presented in figure three.

Figure 3

Proportion of Distractive Behavior
in the Regular Classroom Setting



Discussion

As the data in Figures 1-3 attest, a systematic manipulation of the reinforcing contingency in this study produced measurable changes in the amount, duration, and frequency of distractive behavior. In Figure 1, the subject's base output of distractive behavior during pretreatment and extinction sessions was .67 and .56 respectively. During treatment the subject's output was .063. A difference of this magnitude is statistically significant at the .00016 level (Lindsley Mid-Median Test). These data further suggest that the subject's behavior came under rapid experimental control and remained under control until the reinforcing contingency was withdrawn at the termination of criterion performance. Upon withdrawal, the behavior returned to pretreatment levels, thus indicating that the alteration in behavior was due to the manipulated, experimental variable rather than to the influence of an unknown or chance variable.

In Figure 2, the response measures of duration and frequency of distractions display a similar alteration in rate in conjunction with manipulation of the experimental variable. During baseline, the mean duration of distractions was 21 seconds and the mean frequency was 19 distractions per ten minute time sample. These rates were reduced to zero during criterion performance. During extinction, frequency of distractions returned to pretreatment levels. However, duration of distractions rose far above its baseline rate. When the contingency was withdrawn, there were a series of sharp, fluctuating bursts in the response rate which suggests that the emotional effects of extinction were reflected in the subject's performance. During extinction, the subject's attention span was erratic and variable. He made such comments as "I'm tired," "What time is it?" "I don't care about earning a model anyway." During one session, the subject sat motionless for an entire session of 45 minutes and refused to attend to the task.

During reinstatement of the contingency following reversal, Phillip's emotive reactions subsided and he reconditioned rather quickly (Figure 3). As indicated earlier, Phillip was placed on a VI: 50 where he was reinforced on an average of once per 50 minutes for producing task oriented, distraction free behavior. The data in Figure 3 were taken in a regular classroom setting where the number of potentially distracting stimuli was much greater than in the controlled setting where the subject was initially conditioned. In addition, control or regulation of these stimuli was nonexistent in this particular setting.

The experimenters are in the process of transferring the control of Phillip's behavior from artificial to natural reinforcers. Each tangible reinforcing event is accompanied by the administration of attention, praise, and social approval. It is expected that the higher rates of distraction free behavior produced by the subject will stimulate the operation of such natural reinforcers as task completion, positive feedback, academic success, and the acquisition of new knowledge. These natural reinforcers should exercise a maintenance function on Phillip's established task oriented behavior. An extended followup study of the subject's academic performance will provide data on how well these stimuli maintain distraction free behavior.

The functional analysis of Phillip's attending behavior suggests that individual conditoning techniques can be used to acquire efficient, stimulus control over behaviors which are maintained by stimuli that are very difficult to control or regulate in group settings. Once the behavior has been brought under experimental control, procedures can be established for programing generalization and maintenance of the modified performance in settings where maintaining stimuli operate in an uncontrolled fashion. The results of this study appear to have implications for treatment of a variety of idiosyncratic behaviors which actively interfere with successful academic performance among children in the educational setting.

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NON-DIRECTIVE THERAPY--A MODIFICATION

by

Robert V. Turner

Introduction

The purpose of this paper is to describe a program in which a modification of nondirective counseling was used effectively in an educational setting on a short term basis. This modification involved the blending of some elements of directive techniques into a predominantly nondirective approach and the combining of group counseling with individual counseling. Although this program was expressly designed to meet the needs of a specific group, it is suggested that similar groups can be found in most junior high schools.

A basically nondirective approach to counseling was used in this program because the prospective subjects simply would not tolerate a strictly directive approach. The nondirective or client centered approach to counseling and psychotherapy has been so ably expounded over the last 25 years by Carl Rogers and his disciples that a definition here beyond the association of the term with his name would be redundant. Client centered or nondirective theory is said to have developed in a context between counseling and psychotherapy, with psychotherapy remaining as the essential core to the present (Grummon, 1965).

One of the central tenets of nondirective counseling has been that the counselor is essentially permissive, with the client selecting the goals and setting the pace of counseling. The assumption was that as nondirective counseling progressed more effective behavior would result. However, a carefully designed recent study seemed to refute this assumption (Volsky, Thomas, Norman, and Hoyt, 1965).

In recent years there seems to be an increasing tendency for counselors to take a more active part and express their own feelings openly in the interview. Tyler (1961) conceives of counseling as a process whereby the client is actively helped to use his personal resources. Both Rogers (1962) and Gendlin (1962) emphasize the importance of a two way relationship for therapeutic movement. Grummon (1965) states that a genuine expression of the counselor's feeling is sometimes followed by considerable therapeutic movement.

A traditional difference between directive and nondirective counseling theories has been the avoidance of setting specific objectives or goals by the client centered therapist.

Now, Grummon (1965) believes that the counselor can set more definite goals than Rogers advocates without destroying the client centered approach. His position is based on the statement, "The conditions deemed necessary for change exist on a continuum rather than on an all or none basis (p.67)." He contends that the counselor can focus on specific goals as well as on creating optimum conditions for change. In other words, the achievement of insight by the client can be speeded if the counselor stresses the desired goals. This idea is consistent with Van Dyke's (1966) notion of "communicated expectancies" in which the child receives and is influenced by messages from significant adults in his life concerning their attitudes and anticipations as to his performance and behavior.

Nondirective therapy, by definition, implies a permissive approach which tends to restrict its usefulness in the public school setting. The general shortage of qualified therapists, the emergency nature of many cases in the public schools, and the press of numbers plead for a faster way.

When the counselor works in an institutional setting, it is frequently the case that the problem at hand must be resolved with dispatch. In such cases the therapist must take short cuts and specify goals. This would seem to be especially true where pressure might produce anxiety in the therapist. We recall that, according to Roger's dictum, it is the client, not the therapist, in whom some anxiety may contribute to therapeutic movement.

The idea of nondirective therapy does not necessarily mean, nor does it require, a laissez faire attitude--wholly permissive, and unstructured.

As applied to children with problems in school, it should mean that therapy is not rigidly prescribed as to its direction. It certainly can and should be organized around specific goals with the therapist, quite frankly, maintaining or exemplifying certain expectations and limits. This must be done in education because of the practical considerations of time and circumstances. There is, at best, a questionable gain to be derived in education from complete permissiveness in a period of preliminary floundering. Let the child lead you. Of course! But it is asking too much of a troubled early adolescent, for example, that he sort out and select rather distant goals for himself as well as determine the most effective pathways to their achievement.

It is suggested that the term "nondirective" should refer to direction, per se, and not to destination. The therapist must maintain or exemplify the goal that he hopes to help his client achieve. In this case he can be, perhaps should be, somewhat directive. It is in the paths or ways by which the goal can be approached that the therapist should be nondirective.

Various outcomes have been attributed to group counseling or group psychotherapy, including improvement in personal and social adjustment, greater tolerance of others, better self understanding, and ability to face and solve problems (Koile, 1961; Hoyt, 1960; Froehlich, 1958; Corsini, 1957; Driver, 1954). Significant improvement in behavior and attitudes was reported by Webb and Eikenberg (1964) from a counseling program with a small group of socially maladjusted junior high school pupils on a short term basis.

From these accounts, it was felt that group counseling should receive equal emphasis with individual therapy in this program.

The problem was to devise and implement a first aid therapy program to intervene in a school situation where a large number of students were underachieving and considered to be in danger of dropping out of school. The school's plea was for any program that promised to help alleviate the situation quickly. The physical situation could scarcely have been worse. A delayed building program had resulted in two complete junior high schools occupying a single obsolete structure, on a shift basis.

While a primarily nondirective approach to treatment was selected, a judicious blend of directive techniques was included to provide a modicum of structure and to act as yeast to speed the process.

The decision to alternate group and individual counseling proceeded from the therapist's belief that each might act as a catalyst on the other, resulting in more meaningful treatment and more rapid progress in this situation than either one undertaken separately.

The work to be reported here involves the application of a combination of individual and group counseling, using nondirective and directive techniques, to a group of adolescents who were experiencing problems of academic and social adjustment to the extent that they were considered serious under achievers and in imminent danger of dropping out of school.

Procedure

The students selected for the work described in this paper were ninth graders attending a junior high school in a central Virginia city of some 40,000 population. The ninth grade in this school contained more than 400 students and was served by one guidance counselor. The age range of the subjects was 14 years, six months to 17 years, six months. The mean age was 15 years, two months.

Selection of the treatment group was accomplished by the guidance counselor to whom the students had been assigned for a minimum of one semester. Twelve students were selected for inclusion on the basis of the following criteria: (a) the counselor's personal knowledge of them and her professional opinion as to the most likely prospects to drop out of school because of academic or personal problems or both, and (b) students expressing a desire or willingness to accept help with personal or academic problems. Since need and desire for help were the deciding factors, population size was too limited for the application of random selection procedures.

Since the group as selected contained all of the most critical cases then known to the counselor, with selection based on her subjective opinion, no truly comparable group could be established as a control. Any subsequent group chosen by the same counselor would have been less critical, while choices by a different counselor would have involved different personal bias. The absence of a control group is a recognized weakness of the study.

Also recognized as a weakness is the absence of objective test results leading to statistical analysis. No data beyond observation by the therapist and school records were obtained during this study for two reasons. The first reason was concern as to the effect of insistence on tests on the therapeutic relationship. This concern is consistent with Rogers' (1942) statement, "If the psychologist begins his work with a complete battery of tests, this fact carries with it the implication that he will provide the solutions to the client's problems. These are not genuine and do not deeply help the individual, but tend to make him either resentful or over-dependent. (p. 250)."

The foregoing statement forms Rogers' early theoretical basis for not giving tests prior to nondirective therapy and constitutes the principal justification for the omission of tests from this study.

The second reason was that a majority of the subjects conditioned their acceptance of help on the promise that they would not be subjected to tests.

This work was instituted on an emergency basis in January, 1966, with the short term goal of forestalling possible dropouts by helping the participants to improve their personal adjustment and academic performance through counseling. This goal was specified to the participants at the outset and maintained throughout the period of treatment. An alternating group counseling and individual counseling approach to therapy was employed. Nondirective and directive techniques were combined, with a nondirective orientation predominating.

The participants were divided into two equal groups for group counseling, each containing four boys and two girls. A schedule was developed whereby weekly group sessions were alternated with individual conferences so that each participant had at least one session of individual therapy between group sessions. The therapist employed nondirective techniques during the group session, functioning largely as a participant observer. At the end of each group session, the therapist assumed a directive role in evaluating the completed session and in selecting discussion leaders and areas to be considered at the next group session.

Individual therapy followed essentially the same pattern, with a nondirective approach being used to deal with personal or emotional problems and a frankly directive approach in matters specifically related to school.

The approximate time ratio employed in both group and individual work was: nondirective, 90 percent; directive, ten percent.

The project was conducted throughout the second semester of school, ending in June, 1966.

A followup study was conducted in June, 1967, or one full year after termination of therapy, and again on February 6, 1968. The latter date was chosen as being one full month beyond the date on which the youngest member of the treatment group reached the age of 16. According to Virginia law, school attendance is not mandatory beyond age 16.

Results

The first counseling sessions were held in January, 1966. When therapy was discontinued at the end of the school year, each subject had had eight group counseling sessions and a like number of individual conferences. Of the twelve students originally selected, one girl did not choose to continue after the first meeting. Also, one boy was emotionally unable to participate in the group counseling sessions and was seen by the therapist on an individual basis only. As finally constituted for group work, one group contained four boys and one girl, while the other group contained three boys and two girls.

A subjective evaluation of the quality and extent of results may be derived from the following observations:

1. The guidance counselor received notice of specific and definite improvement in the work or attitude of a majority of the group members from their classroom teachers.

2. According to their report cards, shown to the therapist, most of the group had improved their grades at least one step by the end of the year.

3. The therapist observed a marked improvement in maturity level and self concept for most of the group members.

4. Considerable improvement was noted in the ability of individuals to relate to the group, to participate actively in discussion and to express definite ideas and opinions. Two rather withdrawn cases made dramatic progress in this respect. These will be described in the discussion to follow.

Judged from the school's standpoint, the experiment was successful in that grades, generally, improved and there were no dropouts during therapy.

A followup of this group made after one year (June, 1967) and again after one semester of the second year (February, 1968) is summarized in Figure I. Examination of Figure I reveals that, of the 11 students who participated, one dropped out of school during the first year of therapy; seven were performing satisfactorily in school, and three unsatisfactorily (i.e., failing). At the end of the first semester of the second year following therapy, there had been no further dropouts and school performance remained at a 7:3 ratio, as before.

Discussion

It must be recalled that the work described in this report was performed on an emergency basis in an effort to forestall the expected dropping out of the children involved. The urgency of individual cases dictated an approach calculated to get positive results in a limited time. Although based on nondirective therapy, the combination of directive and nondirective techniques actually employed perhaps could be more properly called "first aid" therapy.

It can be stated that the immediate goal of the program reported here was achieved, inasmuch as there were no dropouts recorded during therapy and the academic performance of a majority of the subjects shifted from "failing" to "satisfactory." Only one dropout was found during followup.

The improvement in work or attitudes noted by the guidance counselor occurred chiefly in the area of teacher pupil relationships. Teachers of these students reported a lessening of overt hostility in the classroom and an increased willingness to attempt at least a minimum of assigned work.

The school system where this work was done uses letter grades to record pupil progress. According to report cards, seven of the 11 members (63 percent) improved all grades by at least one step. Of the remaining two who made no improvement, one was the boy who was unable to tolerate group counseling. This boy (Number 6, Figure1) was the oldest of the entire group, at age 17, and is the one who married and dropped out of school during the first year after therapy.

The general improvement in maturity and self concept observed by the therapist centered around interpersonal relationships in group counseling. The direction of movement was from scant toleration of other group members to active concern for each others' problems and difficulties; from derisive laughter and ridicule at expressed problems during the initial session to serious efforts to help and find solutions during the final session. A generalized growth in self confidence was seen to parallel the development of group identification, which in turn, closely followed increased self understanding presumably associated with individual therapy.

Figure 1

Followup of First Aid Therapy Performed January-June, 1966

Student Identifying Number	June 10, 1967				February 6, 1968			
	School Status		School Performance		School Status		School Performance	
	In School	Dropout (Reason)	Satis-factory	Unsatis-factory	In School	Dropout (Reason)	Satis-factory	Unsatis-factory
1	X			X	X			X
2	X		X		X		X	
3	X[1]		X		X		X	
4	X			X	X		X	
5	X		X		X		X	
6		X (married)						
7	X		X		X		X	
8	X		X		X		X	
9	X		X		X		X	
10	X		X		X			X
11	X			X	X			X

1. Has been declared an emancipated minor by court; supports self and attends night school--hence, not a dropout.

The improvement noted in the ability of individual group members to relate to the groups, to take an active part in discussions, and to verbalize personal problems, fears, or anxieties before the group was especially evident in members whose most obvious presenting symptom was withdrawal. Two cases will be described here. The first was a boy, an only child, age 14 years, six months, of average intelligence as measured by group tests in elementary grades. Frequently he refused speech, and in written answers to questions during the first session, he denied having the ability or desire to do successful work in school. He was able later to verbalize his problem to his group as centering around peer relationships and the group came through with support and practical suggestions for improvement. Followup of this boy (Number 4, Figure 1) indicates some failing work in the 1966-1967 school year but he has remained in school and was performing satisfactorily as of February 1, 1968. Group contact seems to have been the critical factor in this case. The second case (Number 3, Figure 1) was a girl, age 15, with one older brother and a rigidly controlling mother (who was separated from her husband and who entertained a succession of men). Examination of her cumulative record revealed a pattern of regression in intellectual functioning as measured by the following tests (Table 1).

Table 1

Regression in Intellectual Functioning of One Subject

Grade Level	Test	I Q
3	Kuhlmann-Anderson	105
4	Otis Beta	93
5	Lorge-Thorndike	85
6	California Test of Mental Maturity	82
9	Peabody Picture Vocabulary	68

Allowing for the differences between tests, a significant change in functioning is apparent.

Individual and group counseling quickly uncovered a mass of repressed hostility and frustration. Two months after the beginning of therapy, she attacked another girl in school with a broken bottle after very slight provocation and inflicted serious injury. However, therapy was continued without interruption. Soon after termination of therapy in June, 1966, this girl petitioned the court for release from her intolerable home situation. She was granted the status of emancipated minor and has since supported herself with a regular job while attending school at night. Her present school performance is satisfactory.

The foregoing results are supported by Mann's (1967) recent findings that "structured but permissive" group counseling with mentally retarded children resulted in improved self concept, reduced anxiety, improvement in academic subjects such as arithmetic and reading, and improvement in general school behavior.

Conclusion

The conditions under which this study was made imposed limitations which preclude the generalization of results. It was not intended as an experimental study, but as an innovative exploration in which therapies and techniques were combined in an urgency of effort to ease a critical situation in a school. In this case, it worked. Having no basis for comparison, we cannot say how well. We can reiterate that all were selected originally as poor risks, from the school's standpoint, and that a followup after one and one-half years shows that only one has actually dropped out of school, while seven of the remaining ten are performing satisfactorily. This seems to represent improvement over expectation. Also, it should be stated here that the one who dropped out was the same boy who could not tolerate group counseling, and so was not exposed to the full influence of the program. The experience of the program and the subjective evidence presented leads me to suggest that a predominantly nondirective approach to therapy which contains some elements of directive therapy (at least to the extent of the establishment and maintenance of goals), can, through an alternating program of group and individual counseling, produce positive results more quickly and of a more lasting nature than either approach used alone. At least, the results obtained suggest this as a fruitful area for further research.

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ABSTRACT

SPECIAL EDUCATION FOR THE ADDICTED STUDENT

by

Herbert Rusalem

Disengagement from prevailing social values and mechanisms characterizes the addictive process. At the time of initial addiction, this disengagement process is already well established and progressive. As the addiction experience runs its course, disengagement deepens to the degree that the student identifies himself largely with a subculture which subscribes to other values and behaviors. His increasing isolation from interaction with the reinforcing elements of the mainstream culture effectively shields the student from the common reinforcements of American society. In his isolation, he finds increasing gratification from the rewards offered by the deviant subculture.

Addiction is a complex syndrome which engulfs the total individual in a dehumanizing process. Restoration of the individual depends upon the combined impact of a variety of professional interventions, all designed to reintegrate him into the mainstream of social living. As a rule, a multidisciplinary approach, including the use of indigenous aides, is needed. In this spectrum of services special education has a unique role in that it provides a link for the addict to the world he knew throughout his childhood and adolescense. Even though the educational world may not have been fully gratifying to him, he adapts well to it in his current childlike state because the part he plays in it is relatively dependent and ego centered. If it is well managed, special education meets current needs and can be used to build a bridge to a more responsible and independent adjustment through moving the individual toward more mature relationships with others, and greater acceptance of responsibility for self.

PIAGET, SKINNER, AND AN INTENSIVE PRESCHOOL PROGRAM FOR LOWER CLASS CHILDREN AND THEIR MOTHERS

by

Norma Radin

Introduction

Discussed here is a program which uses the theories of two men whose views are not often incorporated into one program, Jean Piaget and B. F. Skinner. As a matter of fact, whether either gentlemen would feel completely comfortable about the juxtaposition of their names is not certain. Nevertheless, the staff members of the Early Education Program have found the combination to be highly effective and practical. Piaget's theory provides the foundation for the preschool curriculum which has as its major goal the cognitive growth of the children, a prerequisite for subsequent achievement in school and fulfillment as a thinking human being. Skinner's work forms the basis of the parent education program which focuses on teaching parents child management skills deemed essential for a gratifying, growth producing home life. It is felt that the program would be incomplete without either phase, or either theory.

The Early Education Program involves, as participants, 100 four year old children who come from disadvantaged homes. One-half of the youngsters are Negro and one-half white; one-half are boys and one-half are girls. The children attend class one-half day, four days per week from October through June. There are ten children, one teacher, and one aide in each classroom. In addition, each child is visited in his home every other week by his teacher who conducts a tutorial session, lasting aobut one and one-half hours, while his mother is present.

The goal of the home visit is two fold: to involve the mother in the educative process so that she may incorporate the role of teacher in her every day activities with her children, and to meet the child's individual cognitive needs which cannot be dealt with adequately in the group setting. For example, it is during the home visit that diagnostic instruments are administered which enable the teacher to assess the child's specific strengths and weaknesses. With this knowledge, she is able to attend to particular difficulties he is having. To insure the maintenance of a tutorial relationship with mother and child, an aide accompanies the teacher when other children are present and conducts an enriched play program, a dilution of the preschool program, for the younger siblings.

The Early Education Program has three major objectives:

1. To develop a preschool curriculum for use in a classroom and in a home tutorial setting based on Piaget's theory of the sequential development of the intelligence

2. To develop a model of curriculum innovation in a school system utilizing a triad of theorist, diffuser, and classroom teacher

3. To develop a group parent education program focused primarily on teaching mothers how to foster the development of internal control in their children, through the use of behavior modification techniques.

Curriculum and Method

Insofar as the Piagetian curriculum is concerned, a full description of the content and methodology would be beyond the scope of this paper. Part of the curriculum has already been described in articles in Young Children and the Journal of Creative Behavior. Fundamentally, the program is based on Piaget's concept that intelligence develops by qualitatively distinct periods, the sensory motor period, the preoperational period, the period of concrete operations, and the period of formal operations. Attainment of a later stage is not possible without solid attainment of the earlier stages. Although the age at which children enter any of the periods may vary, the sequence is invariant. Passage through the stages grows out of the coordination of actions, at first physical, and then mental, rather than by manipulation of symbols.

The curriculum goals are founded on Piaget's two aspects of knowledge: (a) the operative aspect which involves various types of mental operations, and (b) the figurative aspect which pertains to the type of symbolization involved in the operations. Examples of operative knowledge are the ability to classify, and the ability to seriate, or order things, according to an ascending or descending scale. Operative knowledge also includes the ability to handle numbers, spatial relations and temporal relations. The figurative aspect of knowledge pertains to the various levels of symbolization from the concrete object, to parts of the objects, an imprint or sound made by the object, a representation of the object, and finally to the work representing the object.

One of the major curriculum goals is to fascilitate the movement of the children from the sensory motor period, at which most of them are initially, to the preoperational period. In specific terms, facilitation of movement out of the sensory motor stage involves providing a structured setting in which the children can learn to classify objects into an increasing number of categories, to seriate three, four and eventually seven and eight objects, and to comprehend the meaning of numbers so that they will be recognized regardless of whether the objects are spaced far apart or massed together.

The second major curriculum goal pertaining to the figurative aspect of knowledge consists of helping the children to move from the concrete to the symbolic level. This procedure involves more than merely teaching the children to associate a word with an object. To truly learn a word, the child must be able to perform the same mental operations with the word that he can perform with the object it represents. Irving Sigel of Merrill-Palmer Institute, for example, found that disadvantaged preschool children have a much harder time categorizing life sized, colored pictures of familiar objects, such as a cup and a pencil, than they do with the objects themselves, in spite of the fact that the children could label the objects in the pictures with no difficulty. This phenomenon was also found in the Early Education Program. Most of the children are initially unable to perform mental operations with representatives of objects. For this reason, training in classification, seriation, spatial relations, etc. starts at the sensory motor level. To provide training in classification, children are given kits with toy objects which can either be put on the foot, such as a sock and a shoe, or on the head, such as a cap and a fireman's hat. The children are asked to put the objects together which go together. If they cannot, the teacher asks the child to show her what one does with each object. It has been found that by going through the motions in a sensory motor fashion, or by motor encoding, the children quickly see that the objects can be put into two groups. It is not critical initially that the children use appropriate words to explain the basis for their classification. It is sufficient that they be able to show the teacher what can be done with the two groups of objects. By performing the physical operation on the object, the ability to perform the operation mentally is facili-

itated. Soon, when presented with other kits of items, such as those which can be eaten or bounced on the floor, the children are able to perform the operations mentally and can correctly place the objects into two categories with no difficulty.

Sociodramatic play is another sensory motor activity used to facilitate cognitive growth. When used in the manner described by Sarah Smilansky it has been proven to be a priceless vehicle for advancing the children into the symbolic world. For example, in playing "mother," the children are soon able to use blocks for food, and straws for candles, after starting with the concrete objects themselves. They learn the vital lesson that anything can be made to represent something else.

In learning spatial and temporal concepts, the children physically move over and under a table, or inside and outside a box and thus build up concepts. Similarly, in going through a sequence of physical activities the children begin to learn the meaning of "first," "last," and "next to last."

Words are not ignored, however. A modification of the Bereiter-Englemann program consisting of patterned language drills is also included in the program. In the Early Education Program, however, language is not taught for cognitive development as it is by Bereiter and Englemann. Rather, it is included to help the children focus on concepts and retrieve them. It also enables the youngsters to express the ideas they have, and thus to communicate with one another, correcting one another's misperceptions. The patterned drill is not seen as a mechanism for teaching concepts but is important in helping children to use the concepts they have acquired through a nonverbal sensory motor training program.

The curriculum development process entails three phases:

1. The delineation and sequencing of specific goals withing each of the cognitive areas. In classification, for example, the goal might be the dichotomization of food vs. things to write or draw with.

2. The development of a variety of teaching activities to help the children reach each goal. An example would be using a variety of kits which include various food items and pencils, crayons, pens, and paint brushes to be sorted.

3. The development of diagnostic tasks to determine whether or not the children have mastered the concepts being taught.

A description of how these steps are implemented brings us the model of curriculum innovation which is being developed, or the second objective of the Early Education Program. The most critical part of the paradigm, which can be transposed to any grade level, involves combining the efforts of three categories of staff members:

1. A theorist who thoroughly understands the abstract theory serving as the foundation for the program who is able to derive specific goals for the children from the theory.

2. A master teacher who is able to comprehend the essence of the theory as interpreted by the theorist, and who is capable of creatively translating the goals into specific teaching activities. The translation process involves close coordination with the classroom teacher who partici-

pates in the designing of each activity and provides feedback about its effectiveness.

3. A classroom teacher who is selected on the basis of her interest in helping to develop a new curriculum and her willingness to try unorthodox approaches when recommended by her curriculum supervisors.

In the Early Education Program there is one theorist, two diffusers, and ten classroom teachers. Whether or not this ratio can be altered without damaging the efficacy of the model remains to be tested. A third diffuser in the program performs a role that is becoming increasingly important in early intervention programs. She supervises the ten nonprofessional staff members. After participating in discussions with the curriculum supervisors, she explains to the aides how the teachers will be implementing the goals, and she discusses the role of the aide in assisting the teacher.

In addition, modifications are made so the curriculum can be used for children below the age of four during the home visit.

The theorist and diffusers meet several times per week to select and discuss the goals for the coming 14 days as they review the progress of the children revealed by their performance on diagnostic tests. New diagnostic tasks are also developed at this time. Each diffuser meets with five teachers weekly to discuss the children's progress and techniques of implementing the new set of goals. The entire staff, including the aides, meets as a unit on Friday when most of the day is devoted to hearing a presentation of theoretical material, and reports of other project members, such as the research associate and the social group worker conducting the parent program.

Thus far, the model appears to be generating great enthusiasm and a strong sense of cohesion. A feeling of great fortune in being part of the program appears to be pervasive.

The applicability of this paradigm to the kindergarten level is currently being tested in a supplementary kindergarten program primarily for children who participated in a pilot preschool program conducted last spring. In the Supplementary Kindergarten Intervention Program (SKIP), there is also a teacher eager to try the new approach, a master teacher serving as a diffuser, and a theorist, the same one who is working on the Early Education Program, Dr. Constance Kamii, who is interpreting Piaget's theory and deriving goals from his concepts of cognitive growth. The enthusiasm and cohesion evident in the Early Education Program quickly developed in the SKIP Program in spite of the usual difficulties entailed in instituting a brand new program in a school system. Although there is no question that a capable staff is essential to the success of any program, it does appear that the paradigm which has been developed utilizes and organizes these capable people in a highly effective manner.

Parent Education Program

The third major objective of the Early Education Program is the development of a parent education program, primarily focused on inner control, and secondarily on cognitive development. The staff feels that growth in both intellectual ability and self discipline are essential for success in school and ultimately in our industrial society. Time has not permitted a discussion of the fostering of inner control in the program, but it is an intrinsic part of the curriculum. The children are taught to plan ahead,to anticipate consequences of their actions, to make choices when given alternatives, and to

adhere to the decisions they have reached. In turn, a portion of the parent education program is devoted to teaching parents how to foster the cognitive goals of the program which are interpreted to them. The twin objectives of intellectual development and self direction permeate all activities of the Early Education Program. The former merely has greater emphasis in the work with children and the latter in work with groups of parents.

A research design has been built into the parent program to test the effectiveness of the program per se, as well as the effectiveness of two modes of presenting the same content. Thus, there are three groups of parents, matched on critical independent variables and willingness to participate in the meetings. One group serves as a control group and is not involved in any group sessions. The other two groups serve as treatment groups, each presented with the same content in different ways. The two treatment groups are divided into small discussion groups of about ten mothers who meet weekly with a social worker in a school or community center. Baby sitting and transportation are provided free of cost. Each meeting is prededed by written and phone reminders of the next session. Incentives for attending the meetings are also provided to both treatment groups. At almost all meetings, an inexpensive education gift for the child, such as a book or puzzle, is presented with additional, more personal gifts, and a diploma, three times during the year.

The content of the parent education program consists for the most part in a Skinnerian behavior modification approach to child management. Reinforcement patterns are used as a foundation for the development of inner control by the child.

The parent curriculum is divided into three units of approximately six weeks each. There is a break of three weeks between units, each presented as an entity having its own introduction and summary. Unit I focused on principles of behavior modicication which were related to specific child management problems suggested by the mothers. The first lesson dealt with an overview of behavior modification, differentiating contingencies which increase or maintain behavior, contingencies which reduce the frequency of behavior, techniques of shaping new behaviors, etc. The second lesson pertained to intermittent and continuous reinforcement schedules and their consequences. The third lesson differentiated primary and secondary reinforcements. The fourth dealt with punishment, and the fifth with other techniques of reducing the frequency of undesirable behaviors. The sixth lesson and last was a summary of the entire unit.

Unit II, now in progress, focuses on activities the parents can engage in to foster the cognitive development of their children. The intent is to indicate techniques by which commonplace household and play activities can be utilized to reinforce the classroom goals. The unit started with an observation of the class program preceded by a talk by one of the curriculum supervisors discussing the preschool curriculum. The weekly lessons are paralleling the class program. For example, one lesson focuses on how parents can encourage and help their children to engage in sociodramatic play at home to facilitate their ability to handle symbols. Another lesson indicates how music can be used to foster motor encoding by acting out the words to songs. A third lesson points out how trips to the grocery can become golden opportunities to enhance classification skills in discussions about the meat department and the varieties of meats, the dairy sections and the varieties of dairy foods, types of cereal, etc. Throughout this unit, the principles of behavior modification discussed in Unit I are continuously employed. Thus, the parent is encouraged to offer praise when the child elaborates his

role in a make believe session, or the parent is taught to shape the child's behavior by reinforcing approximations of the desired response when the child has difficulty performing a task, such as taking the role of grocer.

Unit III will focus on fostering self reinforcement or inner control by the child. Once again, paralleling the class program, specific less will deal with offering reinforcement for manifestations of inner control, and with giving children choices and structuring the situation so that he is strongly rewarded only for adhering to his decision. The transition from external reinforcement provided by the parent to internal reinforcement coming from the child himself will also be discussed, along with the phenomenon of intrinsic rewards evolving out of successful experiences with a particular activity.

The two modes for presenting the above content are the lecture approach, typical of many parent education programs, and the participation approach, in which the parent actively engages in some aspect of the program. An example of participation would be completing a homework assignment, role playing or rehearsing in the group sessions, and commenting upon role playing by staff members.

By comparing the attitudes and behaviors of the parents in the three groups, as well as the progress of their children, some tentative conclusions can be reached by the end of the year, it is hoped, concerning the effectiveness of the parent program and the optimal method of presenting the content.

Although the school year still has several months to go, and the post measures have not been taken as yet on the instruments evaluating the parent program, some subjective comments can be offered. The most outstanding phenomenon is that each group has developed a core of enthusiastic members, about one-third of the total number, who come regularly and give every indication of using the material they are learning. For example, one mother reported of her daughter, "She really learned to put her toys away when I started using that reward system instead of just nagging her. Now she sometimes does it without any stars, with just my praise."

Another mother reported, "I guess I'm really learning to use those new practices you've been teaching us, and it's not just my preschooler that's benefiting. It's my older boy, too. Instead of yelling at him or spanking him, I've been doing some of those things you told us about and do you know, he raised every single one of his grades on his last report! He seems much more relaxed and happier since I've been less cranky with him."

Finally, this comment from a third mother will serve to illustrate the parents' responses, "You taught us to give our kids alternatives instead of flat orders all the time. The other day I forgot to, and I ordered my daughter to stop yelling. She caught me short and said, 'You forgot my choice, Mother, what is my other choice?' Giving alternatives really results in her choosing one and sticking to it. It really helps."

On the other hand, each group has a core of nonattenders, also about one-third, who never attended a single meeting, although each week almost all asked to be reminded of the next session. These women appear to be the most disadvantaged. At the moment, plans are underway to offer them a differential program. Before the school year ends, a team of two of the active mothers will visit the homes of some of the nonattenders and summarize what has occurred in the meetings. Possibly, a second nonattender will be asked to join the trio, and a small group session will be held. The active members, who appear to

be developing missionary zeal, reacted very positively to the possibilities of this approach.

The rather unexpected situation that has developed is that the members of the lecture group appear to be as involved in the program as the participation group. It has been found that mothers will not accept a lecture followed by a brief discussion. They won't go home until what is on their minds has been disucssed. On the other hand, in Unit I, the members of the participation group were very reluctant to engage in role playing, possibly because they found the area too threatening. The situation seems different in Unit II, which focuses on cognitive development. For example, mothers who were very reluctant in Unit I to enact the role of the parent finding her child playing with matches, seem, in Unit II, to enjoy taking the part of an animal to rehearse for sociodramatic play with their children.

A tentative conclusion that has been reached thus far is that a participation approach may not be equally suited to all types of content, at least not with disadvantaged group members. Further, it appears that content can be communicated and group cohesion developed purely through verbal interaction, even with women from low income homes. Whether there is something inherently attractive in behavior modification principles not present in other areas which might have been discussed is not known. We have also learned that offering concrete incentives for attending meetings, and eliminating all conceivable obstacles to group participation is not enough to overcome the resistance of some mothers to meeting outside of their homes, with a group of unknown women. As I have indicated previously, we are beginning to feel a different approach is necessary with these individuals. Taking a lesson from good behavior modification techniques, we are now trying to proceed by small steps. We are reducing the group size to three, trying to hold it in members'own homes, and using only nonprofessionals in initial contacts. It is hoped that through a series of "minigroup" sessions such as these, the mothers will eventually feel comfortable enough to join the larger group.

Results and Discussion

Because the school year is not yet over, I cannot provide any information as to how effective the Early Education Program as a whole has been. However, as a prediction of possible outcomes, I would like to mention briefly some results that were obtained on last year's five and one-half month pilot program for the Early Education Program. The project was known as the Gale Preschool Program and involved 20 disadvantaged four year old children. The format of the program was identical with the Early Education Program except that there was no group parent program. Dr. Constance Kamii, our theorist, was in Geneva at the time, studying under Piaget, so communication about the curriculum which was in its infancy, had to be conducted via mail. Nevertheless, it was found that the mean gain on the Standord-Binet Intelligence Scale was 13.7 points, and on the Peabody Picture Vocabulary Test, 12.7 points. The children's interest in academic affairs increased significantly according to a standard teacher rating form the Pupil Behavior inventory. The parents were found to increase, overwhelmingly, the amount of education they felt their children must have, the amount of schooling they expected their children to receive, and the educational materials available in the home. The grades that would satisfy the parent dropped, however. It is felt that this may not be undesirable, as their standards for their children may have been becoming more realistic and hence, better for their children, according to Irwin Katz.

The most surprising finding was that the best predictor of gain in Binet IQ, explaining 49 percent of the variance, was a factor on the Pupil

Behavior Inventory, pertaining to dependency of the child. The children who were seen as possassive of the teacher and seeking constant reassurance were the children who gained the most. The correlation was highly significant when each teacher's class was examined separately or the entire group combined. The hypothesis offered is that dependency is actually "susceptibility to social influence" as described by Walters and Parke, and this characteristic is a great asset for young disadvantaged children who are likely to be alienated and distrustful of adults. Perhaps orienting oneself toward adults and perceiving them as reinforcing agents is an important precursor for cognitive growth among preschool children from low income homes. The possibility that some such linkage exists is currently being explored in greater depth.

One disturbing finding arose out of a post post testing of the Gale graduates conducted late in August, two months after the program had ended. The purpose was to determine the stability of the gains achieved in preschool. It was found that the gain on the Peabody Picture Vocabulary Test held up completely, but there was a 6.4 point drop on the Binet. The decline was virtually identical for children who had attended a summer Headstart Program and those who did not. An item analysis was performed on the Binet, and it became clear that the loss did not occur uniformly across all items. Those pertaining to abstract concepts, such as spatial relations and classification, showed a sharp drop. On the other hand, items tapping purely perceptual or labeling skills either showed no decrement at all or a gain. The conclusion reached was that teaching verbal and perceptual skills is far easier than teaching concepts. Two efforts are currently being made to remedy the situation. The early Education Program's preschool curriculum is being carefully developed, with continual diagnostic testing, to be certain that the children are comprehending what is being taught. In addition, the Supplementary Kindergarten Intervention Program, referred to previously, is continuing the Piagetian and language training program during the half day when the children are not in regular kindergarten. It is hoped that by extending the period of exposure to the program, the growth displayed in the preschool program will be preserved.

Comparison with Other Programs

Before concluding, I would like to put the Early Education Program in a frame of reference by comparing it with four other intervention programs involving young children currently in operation in the US. Many others could have been chosen, but these four have such distinctly different orientations that contrasts emerge very clearly. The four programs are conducted by: (a) Ira Gordon (Gainsville, Florida), (b) Sigfried Englemann (Urbana, Illinois), (c) Susan Gray (Nashvilee, Tennessee), and (d) Bettye Caldwell (Syracuse, New York).

Ira Gordon, of the University of Florida, is operating a project which resembles the home visit aspect of the Carly Education Program, but involves a much younger group. Low income mothers are visited weekly in their homes by nonprofessional parent educators, starting at the time the children are six weeks af age, and until the children reach their first birthday. A second group of children will receive weekly home visits between their first and second birthdays, while a control group of youngsters will receive only visits from nurses. Thus, both the efficacy of the home education program and the optimal age of instituting it are being evaluated. The emphasis in the home instructional program,which has a strong Piagetian slant, is on demonstrating to the parent techniques of stimulating the child's sensory motor development and of engaging in play activities with the child which will foster his cognitive development.

A program that has points of similarity with the classroom phase of the Early Education Program is Sigfried Englemann's project with four year old children at the University of Illinois. He is modifying the now familiar Bereiter-Englemann curriculum. The language segment has been retained, but the arithmetic and reading portions have been dropped. In their place is a new curriculum, oriented toward teaching the children skills required for success on the Stanford-Binet Intelligence Scale. The reationale behind this approach is that if the Binet predicts school competence, it is logical to determine the abilities it taps, and teach those skills directly. As this is the first year of the program, the curriculum is in the early stages of development and no objective results are available as yet.

Susan Gray of Peabody College is conducting several types of preschool programs. The one I would like to describe closely resembles Gordon's program in consisting only of home visits, but the children in Gray's program are approximately four years of age, and the home visitors are professionals. The children recieve weekly visits during which a teaching session is conducted in the presence of the mother. An explanation of the curriculum is given to the parent, and additional assignments are left with her to use with her child during the week. An informal test is administered to the child at the beginning of each visit to determine how much ground has been covered and to motivate the parent to fulfill the assignment. It has been found that most of the parents become very active and enthusiastic participants by the end of the year. This home visit program differs from that of the Early Education Program in that no effort is made to keep siblings out of the teaching situation. Rather, they are encouraged to participate since one of the major goals of the program is to facilitate the cognitive goowth of the younger children in the home who are not the direct targets of intervention. The gain in IQ of the four year olds, and their younger siblings, is being compared to a comparable group of children and siblings who are participating in classroom programs using a similar curriculum.

At the Children's Center in New York, Bettye Caldwell is operating an educationally oriented day care program for children six months of age to five years, one-half of whom are middle class and one-half lower class. The curriculum is described as enriched but relaxed. The children spend three to nine hours per day in class. The program becomes progressively more structured as the children approach kindergarten age. The program for four year olds is preacademic in nature and focuses on perceptual training and concept formation. The children appear to be suffering no damage as a result of their prolonged absence from their mothers. With the number of working mothers increasing steadily, and the importance of cognitive stimulation gaining wider acceptance ddily, it is likely that the Caldwell program can offer us a glimpse of education in the near future.

It is apparent that early intervention programs are proliferating rapidly, and that a diversity of approaches, starting at the nursery level, are being explored. This is most fortunate, for it would be sad indeed if a field which started to flourish less than a decade ago were to become so frozen that there would be no room for fresh ideas. We still do not know for certain what the best program is, for which type of child, offered at what age level, for how long a period. As the answers begin to come in, in the form of evaluations, and followup studies of the many ongoing programs, it might be worth keeping in mind the relatively unexplored areas that still remain. To mention a few, what is the most effective program for fathers of young disadvantaged children? What combination of approaches, offered at different age levels, is optimal? Is it feasible for industries and institutions employing a large number of unskilled employees to operate child centers on their premises and provide released time for parents to participate in the

educational program? Can older siblings be trained to provide stimulation for their younger brothers and sisters? what would be the effect of cognitively oriented programs on nondisadvantaged preschoolers? Would a differential educational approach to boys and girls be beneficial? (Kagan and others have found a sex difference in mode of responding even in early infancy.) And finally, is it true, as an increasing number of educators have been implying, that preparing very young children for later competence in school is the best foundation for mental health that can be offered? It is to be hoped that the answers to these questions will be forthcoming soon.

ABSTRACT

RESEARCH ON TEACHER CHARACTERISTICS

by

John F. Mesinger

One problem initiated by the Southern University Professors' Consortium is that of 1.teacher candidate characteristics. For purposes of analysis these may be divided into: (a) cognitive and (b) affective factors. Under the latter rubric we may consider such aspects as creativity, personality, and attitudes.

To give such measures purpose one must define and measure: 2.teacher behaviors in the classroom. This may involve prior teaching performances as well as performances concurrent with the degree work.

Since the raison d'etre for teachers is pupil changes, this implies a need to measure: 3.pupil behaviors, 4.teacher interactions with pupils and, thus, teacher pupil effects.

These problems should logically lead to a study of program selection criteria which effect problem one and the study of training programs and their effects upon problem two.

By referring to the outline of Hollister and Goldston, it is possible to see many of the interactions which must in some way be specified and measured. "An Inquiry into Variations of Teacher Child Communication," by Cohen, Lavietes, Reens and Rindsberg, supplies an illustrated (by anecdotal record) discussion of the kind of teacher pupil interactions which must be measured.

Morse Cutler and Fink have developed data from a factor analytic study of pupil behavior in programs for disturbed children which seem relevant to the task of validating the basic research problem described in problems one and two.

Prior to a discussion of the current state of knowledge concerning the characteristics of effective teachers of emotionally disturbed children, a general idea of the data developed in the broad field of teacher analysis seems necessary. Particularly, the work of Getzels and Jackson seems highly relevant.

The review of the literature specific to our task is depressing even if only limited to the complexity of variables to be measured by primitive instruments. The increasing sophistication of data analysis seems promising. However, information thus gained will be limited by the quality of the raw data gathered.

BEHAVIOR MANAGEMENT TECHNIQUES

by

Roger Kroth

At the 1967 Council for Exceptional Children Convention in St. Louis, Dr. Richard Whelan of the University of Kansas, suggested that the initials "E D " in emotional disturbance might appropriately stand for excesses and deficits of behavior. Most observers of behavior in children are reasonably comfortable with this manner of approaching the problems of pinpointing, recording, and modifying behavior. Some referent may be a baseline or a continuous record of the determined behavior under existing conditions, a comparison of the frequency of occurrence of the behavior between the referred child and other children in his class, school or other comparable group, or a comparison of the frequency of occurrence of the behavior with some internal scale of the observer.

Target Identification

The first step in establishing procedures for modifying behavior is to identify as specifically as possible the observable act that one wishes to have changed. In general, target identification is the responsibility of the one who refers the child. In essence, when one refers a child for special help, he is saying that a particular behavior or set of behaviors is happening so frequently or infrequently that one cannot consider the act to be normal. In other words, the observed behavior must be changed in some discernable way for the child to remain in the environment where he is presently functioning.

Recording Data

Once the target has been identified, recording procedures are instigated. The type of recording that is done depends on the stated problem. For instance, if the teacher complains that the child has a short attention span, then the recorder will record the duration of attention to task. If the teacher complains that the child talks out in class, then the recorder will take a frequency count of "talk outs" during timed observation periods and he will record the rate of talking out per minute or per hour. If the teacher complains about the daily occurrence of a low percentage of problems correct, then records will be kept of percentage correct. In the instance of low percentage correct, the observer also may record the rate of occurrence.

Managing or Modifying Behavior

The remainder of this paper will be devoted to techniques for managing behavior. In the literature on behavior modification one will find a large number of studies in which food, money, toys, and other material rewards have been used effectively to modify or change behavioral patterns. To those working in the public schools the difficulty of applying these material consequences to increase or decrease certain behavioral responses is obvious. Using M & M's or pennies in the classroom has its drawbacks.

The techniques described in the remainder of this paper will at times sound familar. In this case familiarity need not breed contempt. What is important is the consistent, systematic application of these techniques as well as the appropriate selection of the technique to be used. As most teachers know, good management is hard work.

Recording

Teachers often have noted that when a child is aware his actions are being recorded, his behavior will be altered. Children may spell poorly during the week but when Friday test is given, the results of which will be recorded in the grade book, performance is significantly improved. Teachers have observed that looking at a child who is acting out, then opening a grade book while the child is watching, and making a mark without comment, often will stop the acting out behavior temporarily.

Numerous specific examples of the effects on behavior when one knows his acts are being recorded could be given. Recently a university professor was trying to keep track of which students were contributing most often to class discussion. As the graduate students became aware of what the professor was counting there was a sharp increase in contribution in class. One of the difficulties that occurs in obtaining baseline data on human subjects is that when subjects become aware that what they are doing is being recorded they alter their behavior.

Knowledge that awareness of behavior recording effects performance may be used to modify behavior. The decision as to whether to place the graphic record on public display of two or more children depends on the effects on performance rates of the children when this is done. For child A it may be a highly accelerating consequence to see his graph grow faster than that of other children. For child B, if he does not grow as fast as other children, it may have a decelerating effect. In general, for the practitioner in special education working with children who have been unsuccessful in public school competition, it seems that a graph kept by the child or teacher and displayed only to the child, teacher, and parents is the most effective way to accelerate academic behaviors. In this instance, the child is in competition with himself and his past performance. His performance is more analogous to the Sunday golfer who tries to beat his own score rather than the professional golfer on the circuit who has to beat his opponents.

Children can be taught to keep their own charts or records at almost any grade level. At the Children's Rehabilitation Unit at the University of Kansas Medical Center, primary level physically handicapped children are taught to fill in the amount of problems done correctly on large teacher developed graph paper with color crayons. Three large classes of third and fourth grade children in a public school in the Kansas City metropolitan area kept daily charts on the number of arithmetic problems they did correctly under timed conditions. In instances cited, almost every child made continuous growth in problems correct per minute and all children improved over the first day's performance.

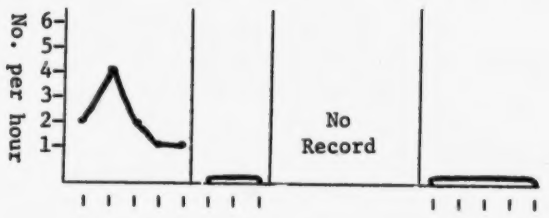
Self recording can be used to decelerate the frequency of undesirable social behavior. Most of us have had the experience of keeping daily records on some aspect of ourselves. A common example is that of placing weight charts in the bathroom or on the refrigerator door. A classroom teacher used this technique with an overweight student during the fall of 1967. The student went from 163 pounds to 157 pounds in twelve days. The student weighed and graphed his progress in the nurse's office every morning before school. This procedure was used effectively with a fourth grade boy who was out of his seat so frequently that it was distracting to the teacher and to the class. The boy had been referred to the Children's Rehabilitation Unit because of management problems plus inconsistent classroom performance. Recommendations from both psychiatric and social work evaluations included possible residential treatment and psychotherapy. These recommendations were held in abeyance while attempts were made to maintain the boy in a regular class with behavioral management techniques.

The teacher selected those target behaviors of greatest concern which were "out of seat" without permission and "talking out" without permission. The teacher then recorded the frequency of occurrence of the pinpointed behaviors

for six days. Special attention was given to the nine to ten o'clock period. (See Figure 1)

Figure 1

Self Recording Out of Seat



After the six days of baseline, the boy was asked to keep his own chart with the teacher reminding him to mark it. The "out of seat" behavior dropped to zero during the nine to ten o'clock period.

There was resistance on the part of the boy for keeping his own charts after the first week. He threw his chart away after the second week, but agreed to keep it for the third week. It was decided at that time that he did not have to keep the records from then on, contingent upon acceptable behaviors in the classroom as determined by the classroom teacher. The teacher was impressed by the youngster's self control and the boy is in regular class over a year later with acceptable behavior and satisfactory academic achievement.

The technique of using graphs to modify behavior has been used with numerous youngsters with success. Self recording appears to be effective. The practitioner, however, must be alert to change and be willing to remove the procedure before it is worn out.

Time

In the United States there appears to be a high value attached to the rate of production. Children are quite aware of the importance attached to numerous records involving time, i.e., the record time of the mile run or the points scored per game in an athletic contest. Boys in particular are interested in how many miles per hour a car will go. Children will ask to be timed on how long they can hold their breath, stand on their hands, or perform some other feat of endurance. Parents have used this knowledge for years with statements like "let's see how fast you can pick up the toys in this room" or " you have three minutes to get ready if you're going with me to the store."

In general there are two categories of time: (a) the duration of time to perform a specified task, and (b) the number of tasks in a series. In the first instance the task is specified and performance time is recorded, and in the second instance the time is specified and the number of tasks are recorded. Procedures for modifying behavior can be developed in either category, depending on the goals of the teacher or behavioral manager.

Frequently, in the literature on emotionally disturbed or socially maladjusted children, one sees reference to the short attention span of these children.

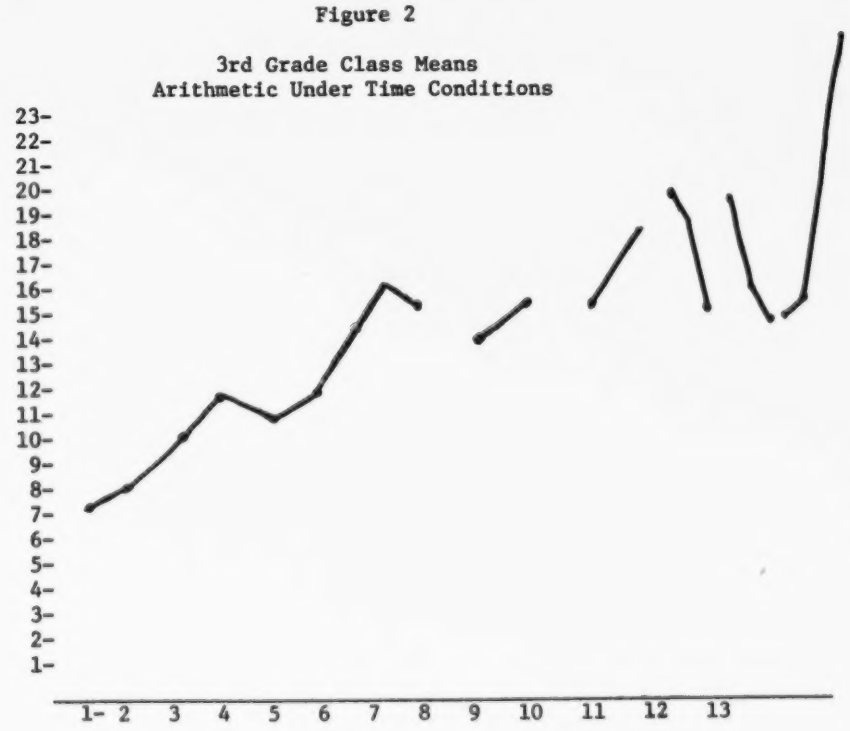
Seldom is there mention of umder what environmental conditions and at what task the child has a short attention span. Children with short attention spans in a classroom environment on an uninteresting task can be found spending endless amounts of time in working out ways of keeping out of work, or in planning and implementing plans to remove and dispose of hubcaps.

With some children it has been effective to allow them to keep track of the amount of time it takes them to do a certain specified task. If the task is held constant it may be quite rewarding to the child to beat his previous performance time. In the field of education it is difficult to maintain constancy of task. An example of how this may be done is to present a given amount of number facts on flash cards and see if the child can improve the time it takes to respond correctly to them. Another task may be a given number of Dolch words to which the child responds correctly while keeping track of start and finish times.

The method of recording time will depend on the age and ability of the child, and the ingenuity of the teacher. Children who can tell time can use the wall clock, and they can record on the top of their papers the time started and time finished. Some children can use the stopwatch to record the time lapse. Teachers have stamped two clock faces without hands on the child's work sheet and they have asked the children to draw in the hands of the clock for start and finish times. This has been done successfully with primary level handicapped children. Some teachers have used the automatic time recorders that stamp the times on the children's work sheets.

The other approach in using time to modify behavior has been to hold time constant and see how many tasks in a series the child can perform. Using this technique of controlled time, immediate recording of performance, and daily practice with a class of third grade youngsters, group means went from 7.6 correct arithmetic problems per minute in 12 days. All children improved their performance. (Figure 2)

Figure 2



All children improved their performance (Figure 2).

In order to try to determine if differential timing conditions have differential effects on the arithmetic production rates of delinguent males in two cultures, a series of tests were administered to institutionalized delinquent males in Costa Rica and the United States. Sheets of simple arithmetic problems were prepared. The four time conditions were a five minute timing undisclosed to the subjects, a one minute timing, a three minute timing, and a six minute timing. In each condition the subjects were told to work as quickly and correctly as they could. The subjects had a significantly higher rate of correct arithmetic problems under the shorter known time limits than they did under the longer time limits.

The setting of time limits seems to have an effect on production. This, of course, is not news. Time limited therapy has been suggested by psychoanalysts from Freud's time to Franz Alexander. In fact, a study of Shlien, Mosak, and Dreikurs in 1962 resulted in significant growth in self concept in half the time limits were designated in advance rather than under unlimited therapy conditions.

Materials

The appropriate selection and presentation of curriculum materials for exceptional children may have tremendous effects on both social and academic behavior. The short attention spans mentioned earlier may be related to material that is too easy, too difficult, uninteresting, poorly programed, as well as being related to ineffectual consequences for emitted responses.

For those behavioral managers who are merely interested in watching the line on a graph suddenly rise, it is possible to obtain outstanding results by changing materials. If, for example, the target selected for acceleration is the number of correct arithmetic problems per minute, one may start the subject on problems that require a large number of operations to solve. Then the teacher can change to simple operation problems and the records will show a dramatic rise in problems worked per minute. Similarly one can obtain a rapid increase in the number of books read per week by changing from books like Edwards' Experimental Design in Psychological Research to books like Huff's How to Lie with Statistics.

While these examples seem obvious, the point is sometimes ignored when one evaluated a pupil's progress. If rates of production are horrendously low, and they are accompanied by unacceptable social behavior, then one should examine the pupil's ability to respond to the presented materials. If the material is inappropriate, then superior methodology will have little effect.

Assuming that the material has been selected appropriately, there still remains a great deal to be said about the methods of presentation. Quite often an analysis of the child's work will reveal some possibilities for rearranging the method of presentation. An example of this type of analysis is found in the case of Bart. Bart was a third grade boy who had classroom behavioral problems as well as low academic performance. There were enough high points in his daily record of work to indicate that functionally he was capable of better performance (Figure 3). At point A on the graph, the teacher stood beside Bart and told him that he was to finish his assignment if he expected to go to lunch with the rest of the class. The boy demonstrated that he could do work quickly and correctly. Although holding lunch is a procedure that has been used to get assignments done, it was felt that in the public school classroom

this would probably not be a first choice procedure. At point B an analysis of the youngster's work showed that he would work one line but not complete the whole assignment. It was decided to structure the assignments and provide Bart with strips of work from the full page assignment. An immediate change took place and was significantly different (P. 005) than early performance rates. Bart even asked for more work to do. At point C the task was changed to subtraction. Bart's rate of correct performance dropped to a point parallel with earlier work. The teacher grouped four youngsters together who had similar problems for reeducation. Within a short time Bart's rate went back up.

Another point to consider in using materials to modify behavior is the order of presentation. The most difficult materials often have a low probability of being accomplished and to insert them at the end of the day is to flirt with danger. By the same token, few teachers who have taught hyperactive youngsters would have a class party at the beginning of the day if there was any expectation of school work during the rest of the day. Therefore, Premack's hypothesis that "of any two responses, the one that occurs oftener when both are available can reinforce the one that occurs less often, but not vice versa", tends to be confirmed in every day teaching situations.

People

The last major category to be considered in developing procedures for managing behavior is people. During the past year at the Children's Rehabilitation Center, parents have become more directly involved in learning and applying behavioral management techniques. The purpose has been to try to develop the greater 24 hour consistency of a residential center for children who are in day schools.

Regularly scheduled meetings take the adversiveness out of coming to school for parents whose major contact with the school in the past was at those times when their child was in trouble. Daily report cards are used, which the parents graph at home. Emphasis is placed on the positive growth in attitude and academics. While our research in this area has been compounded by too many uncontrolled variables it appears that the coordinated efforts of the significant adults in the life of the child produces as great effect for some children as extrinsic material rewards. Using parental praise and daily report cards, the children have equalled or improved the level of growth they had accomplished under a reward system using trading stamps.

The major emphasis of the conferences has been classroom behavior and academic achievement. Usually meetings were schedules on a weekly basis for the first three or four weeks. These meetings seldom lasted over an hour, and rather specific procedures were discussed. Continual emphasis was placed on the importance of parental praise for appropriate behavior, and the replacement of action for talk for inappropriate behavior. Children seem to attend more to what one does than what one says, while adults appear to attend more to what one says he's going to do than what he does. Most of our parents of emotionally disturbed children are highly verbal.

After the first series of meetings there is movement to a maintenance program. meetings are every two or three weeks and last only for fifteen to thirty minutes. Parents are encouraged not to come to school when the child has a bad day, but to wait for the scheduled conference. This is done so that the association is not made between "bad" and parent conferences. The impression of the staff and of the parents has been that these procedures have had a good effect on modifying the children's behavior, and on public relations between staff and parents. Most parents enjoy being considered as part of the team.

Another technique that appears to show promise is the use of peers to modify the behavior of aggressive, acting out children. During the past year Mr. Herman Cline, a junior high school counselor in Olathe, Kansas, has been been working with groups of socially sensitive students in an effort to help the students who are lonely, withdrawn, or aggressive. Enthusiasm is high among the staff as well as among the students. It has been difficult to measure the effectiveness of the program because of the uncontrolled variables. One tends to be impressed, however, by anecdotal reports.

One eighth grade boy who has had scrapes with the law, and whose behavior was such that a meeting was called by staff to discuss expulsion, led to the development of the program. It was felt that the youngster could be maintained in school for some time by the use of behavioral management procedures of obvious recording by the teacher (the boy knew he was in trouble anyway), and by the use of a time out room. It was the opinion, also, that something positive needed to be done. This led to the use of peer groups.

Among other things, the school had not been able to get the boy to dress for gym in two years. Some of the male social leaders felt this was a place to start. By asking him to come out and play with them, they got him dressed and playing within three days. At this time the boy is still in school. He is still a concern to personnel, but there has been definite improvement. There are many small anecdotes that lead one to expect this approach will produce results.

Summary and Conclusion

The general procedures of pinpointing, recording, and modifying behavior have been discussed. Techniques of managing behavior other than the use of food or money and other material reward and punishment systems have been presented.

It would seem that these procedures show promise. They are easily applied and within the realm of possibility in any school setting. The emphasis is on the positive rather than on the negative, and the goal is improved behavior through the systematic application of consequences to behavior.

SELF-CONCEPT RESEARCH: DEFINITION PROBLEMS WITH A COMMON LANGUAGE CONSTRUCT

by

Lee M. Joiner, Edsel L. Erickson, and Richard C. Towne

Today an increasing effort seems to be occurring in research dealing with empirical event management, behavioral analysis, and environmental structures. A number of researchers who once might have been interested in constructs such as self concept have abandoned them in favor of more tractable ones. What appears to be a lessening of interest in hypothetical constructs, states of the organism, and internal dynamic variables is apparent in the change in programs and publications of the Council for Exceptional Children over the past five years.

In light of this trend, presented here are some of the reasons that an intuitively appealing notion such as self concept has not actually paid off generously in a scientific sense (Wylie, 1961; Brookover, Erickson, and Joiner, 1966). In so doing, some of the basic requirements that must be met in order for constructs to become scientifically fruitful will be briefly discussed. As the same time some recommendations which will lead to better self concept research will be made.

Difficulties Associated with Self Concept Research--Epistemological

Predictability vs. Plausibility

The first of the requirements relating to the productivity of a construct concern its status as a predictor of some behavioral event that is of interest for one reason or another. Regardless of the theoretical elegance of the network within which a construct is embedded, a final evaluation of self concept as an educationally relevant variable depends upon how well it serves to facilitate prediction and control of processes central to education. This means, for example, that if we postulate that "to protect a good self concept one will strive hard to select those behaviors which will preserve or enhance it (Sears, 1966)," it is necessary to identify just what those behaviors are and to predict them.

Much of the liturgy and pomp that has accumulated under the label of self concept research could be termed plausible rather than predictive. It has been demonstrated again and again that it is a simple matter for a hard-working and original person to find evidence suggesting the likelihood of a behavior's occurrence after the behavior has already happened. A good illustration was the recent case of Richard Speck. But surely it is a good deal harder to predict some uncertain future on the basis of relevant theory and evidence. This is because it is impossible to predict future events except by chance without understanding something of the workings of the system of events. Furthermore, while repeated unsuccessful predictions cast doubt upon the value of a construct there is no way of disconfirming explanatory statements involving constructs presented in an ex post facto fashion.

Educationally Relevant Criterions

Yet taken alone, successful prediction stemming from an explanatory system involving self concept is not wholly convincing of the

worth of the construct. Recall that we are teachers. Our criterions or behavioral objectives are in large measure culturally determined and capable of innumeration. One of the major contributions of operant theory may have been that it forced us to list some of these specific criterion behaviors. For example, do we want our students to move directly from the busses into the building without unnecessary delay? Do we want our students to pick up copies of a valuable rather than a useless magazine during a free reading period?

While this concern for specific criterion behaviors perhaps accounts for some of the productivity of operant theory, the point to be stressed is that the path from self concept to educationally relevant criterion behaviors must be clearly established. If it was found, for example, that self concepts perfectly predicted the anxiety of a student when he participated in a reading class, it would still be necessary to show that either anxiety management is a direct responsibility of an educational system or that anxiety management concomitantly results in dropout management before self concept data would be as valuable to us.

Nominal Definitions

Yet while successful prediction of educationally relevant criterions must be demonstrated before a construct can be considered fruitful, lack of a commonly accepted stable definition results in such confusion and imprecision that confirmed prediction in one situation for one researcher does not cross validate. In order for results involving a construct to cross validate there must be some constancy in definition from one study to the next; similar observations being made by persons engaged in the verification and falsification of the same hypothesis. An observed tendency to permit variant and surplus meanings to accrue to a term has led to the conclusion that nominal definitions are basically unsatisfactory for hypothesis testing.

To illustrate the argument two nominal definitions of self concept will be cited. A dictionary of psychological terms directed toward potential consumers of research gives the following definition of self concept: "Ideas which one holds about the nature of his self. See Self." And Self is defined as: "See Ego," with the comment,"the self is that part of the personality which the individual feels is 'I.' It may extend far beyond the body, as when an individual comes to feel that his home and his children are integral parts of himself. Self-enhancement, self-protection, self defense, and self-concern are probably the major concerns of individuals (Wulfeck and Bennett, 1954)." None of the expressions in the last sentence are defined in that dictionary.

A comment on self concept is also given:

> The maintenance of favorable ideas about one's self, its adequacy, competence, and social value, is of utmost importance for high morale and social adjustment. Excessive striving for high self-esteem and a good self-concept may lead to a considerable amount of distorted and unrealistic thinking (Wulfeck and Bennett, 1954).

A second example of this sort of defining is found in Sears (1966) In Pursuit of Self-Esteem.

> Self-esteem is defined as possession of a favorable opinion of the self, or a favorable self-concept. In the child, judgments about the self are made in relation to problems and tasks of development.

> The self-concept represents expected success in the child's endeavors to meet these problems and tasks. The self-concept is complex, made up of many facets, with each facet differing in importance - or reward value - from the others. Expectancies have been learned for each facet, so that the individual can predict success or failure in connection with behavior that pertains to a given facet. These expectancies have been acquired and can be changed according to principles of learning. Various aspects of self-concept have properties similar to drive: to protect a good self-concept, one will strive hard (the energizing function) or will select those behaviors which preserve or enhance it. Self-esteem results when the child is able to predict success for important facets of experience.

Lack of clarity seems characteristic of these definitions. But more important, nominal definitions tend to treat self concept mainly from the point of view of what it presumably does rather than what specific empirical observations are correspondent with the term. The explicit connection between a logical semantic system and behavior in nature is lacking. Having been given these definitions, uncertainty as to what to look for in the world that represents evidence of self concept remains. It is a faith approach; certainly it is good to have a good self concept and awful to have a bad one.

Operational Definition

The alternative to nominal definition and a way to counteract some of its deficiencies is operational definition: the linking of self concept to empirical data. As Horst (1965) has noted with respect to the scientific method, the apparatus of experimental control is not its distinguishing feature but rather its requirement that observational data be used in making decisions about states of nature. Thus some have believed that "operationalism", where "every concept or term used in the description of experience (is) framed in terms of operations which can be unequivocally performed (Hempel, 1952)," could clean up self concept research. Specifying the operational criteria for "self concept" would include not only stating "symptoms" which could be ascertained by simply directly observing the person but also introducing observational instruments and related techniques. The exclusion from operationalism of simple direct observation without any manipulation was considered unduly limiting for a science, and, in fact, it has been suggested that several of the most useful concepts in science such as imaginary numbers can never be observed. Consequently, the operational method was broadened or "liberalized" to include recognition that rather than having every statement capable of verification or falsification through the use of observational evidence, a hypothesis cannot be tested in isolation and, therefore, the criterion of testability must be applied to "systems" of hypothesis. Secondly, the system of hypotheses "must be capable of being more or less highly confirmed by observational evidence (Hempel, 1952)."

Operationalism today can be thought of as demanding the utilization of empirical evidence that has bearing upon the acceptance or rejection of hypotheses involving the construct but in practice it generally means providing for some standard way of making empirical observations. In practice, it has usually led to the construction of a scale called an operationalization of self concept.

Although this approach stresses empirical referents for self concept, it by no means solves the problems of providing common definition and usage upon which a set of lawful relationships can be based. While it became

possible to clearly point to the method for observing events explicating self concept in a particular study, the operational methods varied nearly as much from one study to the next as the previously discussed nominal definitions. It remained that while self concept might be "operationalized" in a study, its operationalization was often specific to that study and did not dominate in any way the original nominal "meanings" ascribed to it. What often happened in fact, was that an idea of how "self concept" functions based upon nominal definitions became translated into a series of questions asked as part of a scale or questionnaire.

Ambiguity Attributable to Technical Aspects of Observation

Thus far, I have been concerned with approaches toward definition of self concept as sources of ambiguity detracting from our efforts to develop a public, confirmable set of lawful relations involving self concept. At this point I would like to show that in addition to the ambiguity resulting from varied nominal and operational definitions of the same concept, other technical aspects of the experimental situation not commonly treated as part of "definition" influence the meaning of self concept.

A scale which is used as an operational definition of self concept is considered to possess definitional properties and the score obtained through its use summarizes the definition. When administered, this scale should yield summary scores which show a variance, and we need to be sure that this variance is mainly attributable to differences in the people rather than error. In other words, we require that our scale be a reliable index. If our scale is unrealiable, the observed differences among scores may not be a reflection of differences in self concept as the scale defines it. Our assessment of a person's self concept using this scale is subject to measurement error. And of course even though self concept now has an empirical referent, the empirical observations become ambiguous to the extent that measurement error exists. Therefore, even if an operational definition of self concept is agreed upon, the discovery of changes or variations consistent with some theory, our major means of verifying hypotheses cannot occur unless the empirical referents can be reliably observed.

Ambiguity in the Results of Self Concept Operationalization Attributable to Irregularities in the Scales and Their Administration

A special problem in conducting research on self concepts of exceptional children using elicited verbal responses, our main method of self concept measurement, is the frequently encountered necessity for modifying scales and administration procedures in some way. Because exceptional children show disabilities in such areas as vision, hearing, reading, and attention special modifications of the scales and administration techniques are often made. Frequently, scales are presented through an altered stimulus mode. While the original may be designed for reading and paper pencil response by the person it may be presented in sign language, braille, or read aloud in an interview. Simplification of original vocabulary may also be practiced.

To the extent that these modifications introduce new sources of variation which are not attributable to self concept differences, our results become common equivocal. Friedman (1967), for example, has documented the effect of extremely subtle differences in experimenter presentation of a stimulus and their correlation with experimental results.

Before presenting suggestions for courses of action which should be helpful in generating better definitions of self concept and better research,

let me summarize the difficulties which have been noted:

1. Nominal definitions of self concept found in the literature are diverse and frequently specify some hypothetical set of functions.

2. Operationalism has not provided a solution to definitional problems because these definitions vary from study to study and are often based on nominal definitions held by the researcher which stress function.

3. Unreliable measures may cloud self concept definitions since observed differences are attributable, in part, to error of measurement.

4. Modification of the "operationalization" necessary to permit research on exceptional children introduces another source of ambiguity in definition to the extent that these modifications correlate with total scores.

Recommendations

The following are a few strategies which may provide fruitful. Most of them call for a radical shift in our approach to self concept research and are relatively unique in their total rejection of the idea that self concept represents a "hypothetical state" of the organism. In general, they were derived from a social behavioristic framework as articulated in the works of George Herbert Mead, Charles Pierce, and John Dewey.

It may be advisable to abandon treating self concept as a hypothetical construct and instead consider it a class of verbal behaviors. Rather than developing a theory of self concept perhaps we would be better off developing a theory of self definitional verbal behavior. A great deal of energy has been expended attempting to answer the question of whether a particular operationalization gets at the "real" self concept. Since "real self concepts" are hypothetical, nominally defined states, the question cannot be conclusively answered. However, we can determine the predictive validity of various self definitions.

Stop treating self concept as if it were a "g" factor and begin systematic inquiry into variations consistent with: (a) role--e.g. reader, dancer, athelete, lover, (b) referent--"average Joe", special class student, siblings, Cassius Clay, (c) time--past, present, future. Previous research by the authors (Joiner and Erickson, 1967) shows that systematic differences in response to self concept scales can be produced if the reference perspective is altered. For example, when no reference perspective is specified blind students seem to be comparing themselves or evaluating themselves in terms of the yardstick of other blind students. Suggesting a sighted referent produces quite different results. It should also be clear that students who define themselves as capable statisticians do not necessarily define themselves as capable atheletes and vice versa. Dimensions are clouded when items in scales are inadvertantly getting at varying role behaviors and demands, referent perspectives, and times in the life of the respondents.

If scales are to be used, some attempt should be made to dimensionalize the items which now exist so that the factor structure might become clearer. Actually, there are two ways of going about this. One could conduct an empirical factor analysis of the items in the major self concept scales in use today and then cross validate the factors. Or, an a priori factor structure could be hypothesized on the basis of some theory and subject to test (Nunnally, 1966). Either strategy would be costly in terms of the need to

test large numbers of subjects on large numbers of items.

Since the emotionally handicapped may be especially "suspect" as subjects for research demanding the use of "obtrusive measures," greater attention should probably be given to recording and classifying their self referent statements which occur in spontaneous speech. Pay more attention to the verbal behavior itself as opposed to what lies beneath it.

Consider the source of self definitional statements. It may be of great value to determine who the significant others are in the life of the student because previous research (Brookover, Erickson, and Joiner, 1965) shows that self definitions are quite consistent with the perceived evaluations of these others. Who are the people in the life of the emotionally handicapped child that might be providing him with definitions of himself? And since it has also been demonstrated that self conceptions are most effectively altered through the planned intervention of these significant others (Brookover, Erickson, and Joiner, 1965) the question is raised as to how to get the teacher to be perceived as more central in the life of the student. Once perceived as a significant other it is more likely that the teacher will be able to influence the student's self definitions.

Consider the proposition that preference for a state is not necessarily equivalent to commitment to obtaining that state. Often it appears that a researcher believes that there is something inherently harmful in a discrepancy between what a subject says he would prefer "to be" and what "he is." However, it is often overlooked that preferred states such as ideal selves are reflections of the norms of the society and ideals of the culture. And although completely aware of them, many Americans do not fulfill them. Because a raw discrepancy between ideals and reality is so intimately connected with cultural values and the individual's social context, a measure of the value that a person places upon an ideal contrasted with the value placed upon his perceived present state may be quite useful. Presumably, larger positive value discrepancies reflect greater commitment to some ideal state. This is a Bayesian point of view.

Stop acting as if it had been established that self concept is a necessary and sufficient condition for the elicitation of a particular class of behaviors. We have repeatedly observed that "poor" self concepts of academic ability interfere with academic performance mainly because they limit a person's choice (Brookover, Erickson, and Joiner, 1966). Students who perceive themselves as poor readers are less likely to attempt reading if given a choice situation. On the other hand, viewing oneself as a skilled reader is no guarantee that one will take time to read the homework assignment. In other words poor self concepts are more predictive of behavior than good ones. Self definitions of "being able" permit related behaviors to occur but other contingencies then become important before the behavior emerges.

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PSYCHODYNAMIC MANAGEMENT TECHNIQUES

by

Henry D. Fishel

Increasingly in recent years we have had to come to the realization that aggression may well be a human instinct, an instinct which may be raised or lowered by certain forces, but an instinct which persists nevertheless. Konrad Lorenz (1966) and Robert Ardey (1966) have given us brilliant insights about both aggression and territoriality.

At the Phoenix School, a day school for delinquent adolescents, with which I was associated for three years, we used a variety of measures as management techniques. These measures were arrived at in a pragmatic way--what worked was used; although our pragmatism, of course, was influenced by our experience and our knowledge.

We found that the very severely disturbed, court referred, 14 to 17 year old youngsters with whom we dealt, most of whom were either Jewish, Negro, or Puerto Rican, could be "managed" to the extent that their basic self esteem and their dignity were least interfered with.

These youngsters, coming from severely disturbed homes, where they were either hated or demasculinized, or both, had a strong need to guard themselves against "invasion" from the outside and most of them had reacted to this threat of invasion by the erection of a delinquent facade. They would strike with intensive aggressiveness at anyone who threatened the self which they felt to be in such danger. An analogy to Ardey's work is apparent (1966). These youngsters were defending with intensely heightened aggressiveness the

territory of their own selves. To stem this aggression by the usual restraints, or by counter hostility was completely futile. Only as the threat of invasion was lowered were we able to lower aggression. We could, however, not eliminate it and came to believe that aggression is in all probab lity an inevitable and even desirable state of the human condition.

No school or institution can ever use a unified approach. However, a consensus among the staff of the Phoenix School did develop and the following methods were primarily used by the staff in the management of these very disturbed youngsters:

Inanimate Barriers. One of the simplest ways of preventing youngsters from doing something which you don't want them to is to make it impossible. If is often surprising how little we tend to rely on physical obstacles in our attempts to manage and control behavior. At the Phoenix School we found that they key and the lock were excellent control measures. If one doesn't want a youngsters to fool with lights, the best way to approach this problem is to install a keyed light switch. If one wants to keep a tool out of a youngster's hands there is no better way than a good closet with a strong lock.

Focusing on Aggression Proof Persons. Certain people can develop enormous capacities to withstand aggression. They can see a youngster's aggression as being so apart from their own life stream as to be without barbs (this does not mean that the aggression proof person is not sympathetic to the youngsters, but rather that he sees the aggression as a clinical event and not as something directed towards him). At the Phoenix School we had several such aggression proof persons who were highly resistant to aggressive behavior by the youngsters. When one of the adolescents became especially difficult, one of these people would intervene and the aggression would be focused on him.

Withdrawal. One way that a staff member could often avoid conflict with a youngster and a situation of acting out was to simply retire from the situation. A youngster who has a temper tantrum with no one around him, soon comes to perceive its useless and stops.

Appeal to Common Hazard. Ardey (1966) believes that aggression within any group can be limited when there is a common hazard which comes from the outside. The Phoenix School both in its original phase in which it was essentially a pilot project and later when it still struggled to establish itself had a number of such hazards. We shared some of these difficulties with the youngsters, especially at a time when they were hard to manage, and this played an important role in stopping them from acting out. (This phenomenon can, of course, also be explained by the older concept of identification.)

Food and feeding. Many of the youngsters, even those coming from relatively middle class homes had often been not only emotionally deprived but physically deprived. We found that providing food and other essentials, such as clothing and an allowance, did much to lower the children's aggression. Provisions were unconditioned and not rewards for good behavior.

Fondling and body contact. It seemed to us at the Phoenix School at times that the kind of aggression we saw was not purely composed of hostility, but included a considerable longing for bodily contact. The fact that aggression, contact hunger, and sexuality seem to be closely linked in human beings became very apparent to us at the Phoenix School. This is, however, a fact which still does not sit too easily with most middle class Americans, and many

of our staff found this an especially difficult area.

Distraction. Distracting a youngster during periods of aggression was attempted at times but worked less well than many of the other measures.

Insight. Relatively late in treatment we were able to give some of the disturbed adolescents help in understanding how badly they really felt about themselves and how their feelings came about through the disturbed parent child relationship, or through other forces which crushed self esteem. From this we were able to go on to an examination of the forces in the unconscious which contributed to aggression. Part of insight was also for the youngster to understand that his "reason" for being aggressive was often a subterfuge. Our society taboos aggression so strongly that most people have to invent elaborate rationales for their aggression, as random aggression, or aggression which does not make sense (if not for an immediate cause or reason) is very unacceptable.

The management techniques we employed were, of course, facilitated by the fact that we had a staff which at times numbered as many as eight (not everyone was full time) and which was dealing with less than fifteen children. However, we came to feel that the methods which we used were also applicable in part in situations where the staff to student ratio would be less ideal.

There should be a word of caution about lowering aggression. Many feel that aggression is largely instinctual, perhaps determined natively in each human being, but apparently heightened by invasion of geographic or psychological territory. Unless the sources of aggressive behavior are lowered or diminished, inhibiting the aggression almost always results in depression. Our two most aggressive youngsters, those two whom we eventually could not work with because they presented too much of a risk to the life and limb of the staff, were also the most depressed. Whenever their aggression was too much interfered with or inhibited, often even though the particular methods which we used worked, they would sink into deep depression. This depression was so intolerable to these adolescents that they would inevitably return to their former aggressivity. Cultural factors may play a role here. It may well be that the more typically middle class neurotics or psychotics have learned to live with enormous amounts of depression.

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ABSTRACT

A CASE OF DESENSITIZATION AND TUTORING THERAPY

by

Daryll Bauer, Jr.

This paper examines the learning difficulties of a young boy in the

area of mathematics and the effectiveness of a remediation program based upon Wolpe's theory of desensitization.

Peter was initially brought to our attention in December of 1966. He was considered a bright child but was currently failing seventh grade mathematics. An examination of his case history revealed an excellent environmental situation with normal development until he entered school.

Our department conducted a thorough psychological evaluation on Peter in March of 1967 which indicated a phobic reaction in the area of mathematics. At the conclusion of the evaluation Peter expressed a strong desire "to be good in math," and with his willingness to cooperate with densensitization and tutoring therapy we directed our energies toward the attainment of this goal.

Six desensitization sessions were held from May first through May twenty-second. A hierarchy of situations was constructed and categorized according to Peter's report as to the degree of anxiety which each one produced. In each session a scene from the previously compiled hierarchy was presented for him to visualize. Each time this was preceded by these prior, less anxiety inducing scenes, which were given at the earlier session,

The tutoring phase began the first of June and continued through August. The first several sessions were directed toward the establishment of rapport between student and tutor. With the development of a positive relationship, mathematical situations were examined as they related to everyday living experiences. As the tutoring sessions progressed, math experiences were also taken directly from the mathematics text.

Peter's current behavior, as reported by his eight grade teacher, finds him a B to B+ student in a middle ability group. One case, of course, is not sufficient for wholesale advocation of desensitization therapy but it does suggest the value of researching this hypothesis.

This case study was conducted while doing graduate work at the University of Virginia.